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EXPLANATORY NOTE.

The cost of the Diagram explanatory of Mr. Welton's papers on Population Statistics has been defrayed by the Author. The cost of the Engraving of the Signaculum of the Saints Ecgwyn and Edwyn, illustrative of Mr. H. Ecroyd Smith's paper, has been defrayed half by the Author and half by the Society. The rest of the Illustrations are published at the cost of the Society.

ERRATA.

Page 137, third line, last column, *for* 26·4, *read* 25·4.
Page 140, seventh line from the top, *for* 186,965, *read* 686,965.
Page 150, ninth line from the bottom, *for* proportions, *read* proportion.

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CONTENTS

[Papers marked thus * are Illustrated.]

PAGE.

Address to the Members of the Historic Society of Lancashire and Cheshire. By Joseph Mayer, F.S.A., President..... 1

*Notices of Roman-British Culinary Vessels, discovered in North Wales. By Henry Ecroyd Smith..... 19

The Last Popular Risings in the Lancashire Lake Country. By A. Craig Gibson, F.S.A., Hon. Curator..... 45

Observations on Population Statistics. Part I. By Thomas A. Welton, Esq. 55

*On Population Statistics. Part II. By Thomas A. Welton, Esq. 93

*Notice of a Mediæval Signaculum of the Anglo-Saxon Saints Edwyn and Ecgwyn. By Henry Ecroyd Smith 165

On Some Oriental Geographers. By F. Boyle, F.G.S. 181

*Archæology in the Mersey District, 1868. By Henry Ecroyd Smith 199

On the Gains and Losses in Historic Progress. By David Buxton, F.R.S.L., Hon. Secretary..... 219

The so-called "Petrified Human Eyes," from the Graves of the Ancient Indians, Arica, Peru. By the Rev. A. Hume, D.C.L., F.S.A., Vice-President..... 225

Biographical Sketch of the late H. L. Elmes, Esq., Architect of St. George's Hall, &c. By J. T. Kilpin, Esq..... 233

Mediæval Signaculum of Saints Edwyn and Ecgwyn. Supplemental and Correctional Note. By Henry Ecroyd Smith ... 253

List of Members vii

Proceedings, Twenty-first Session 257

Report presented at the Annual Meeting ..... *ib.*

Treasurer's Balance Sheet 260

Excursion 264

Donations to the Library 265

LIST OF ILLUSTRATIONS.

PLATE.		PAGE.
I.	Roman-British Culinary and Dietary Utensils, discovered near Abergele, Vale of Clwyd.....	to face 21
II.	Diagrams Illustrating how the observed Mortality is affected by the Immigration of Young People from the Rural Districts into Towns	„ 115
III.	Ampulla of Pewter—a Religious Signaculum of the Anglo-Saxon Saints Edwyn and Ecgwyn...	„ 169
IV.	Unpublished Seal of the Consistory Court of St. Asaph	„ 203

LIST OF MEMBERS.

The List of Members is made up to date of publication of this Volume,

(March 18th, 1870.)

The first List was dated 23rd November, 1848; all whose names appeared in it are therefore Original Members. Those who have been enrolled as Mayors or Sheriffs have their year of office attached.

The letter P denotes that the Members, in connexion with whose names it occurs, have read papers before the Society.

Those whose names are printed in SMALL CAPITALS are Members of the Council; and in *Italics* are Life Members.

Those marked thus * are Resident. The post town Liverpool is usually omitted.

A

23rd Nov., 1848. *Ainslie, Montague*, Grizedale hall, Hawkshead, Windermere.

Feb. 11th, 1869. *Amer, Stephen, Bridge street, Birkenhead.

4th Dec., 1862. *Anderson, John, 42, Bold street.

17th Dec., 1857. *Anderson, Thomas Darnley, West Dingle.

4th Dec., 1856. Ansdell, John, St. Helens.

23rd Nov., 1848. Ansdell, Richard, A.R.A., Lytham house, St. Alban's road, Kensington, London, W.

15th Sept., 1854. Arrowsmith, P. R., The Ferns, Bolton.

2nd Dec., 1858. Artingstall, George, Warrington.

P. 4th Dec., 1862. Ashfield, Charles Joseph, 9, Regent street, Preston.

H. Sh. Cheshire, 1857. *Atkinson, William*, Ashton heyes, Chester.

B

2nd Nov., 1865. *BAILEY, F. J., M.R.C.S., 51, Grove street.

8th June, 1854. *Banning, John Johnson, 20, Castle street.

1st Mar., 1866. *Barrow, S., 323, Vauxhall road, and Seaforth.

7th Feb., 1861. *Bartlett, William, 22, North John street.

1st Dec., 1864. *Bath, John D., Garston.

6th Mar., 1862. *Bazley, Sir Thomas, Bart.*, M.P., Hayesleigh, Manchester, and Reform Club, London, S.W.

P.	6th Dec., 1849.	Beamont, William, Warrington.
	21st May, 1857.	*Bean, Edwin, Revenue buildings.
	23rd Nov., 1848.	*Bell, Henry, Hamilton square, and Grosvenor road, Claughton, Birkenhead.
P.	1st Dec., 1864.	*Benas, B. L., 5, South Castle street.
	23rd Nov., 1848.	*Bennett, William, Sir Thomas's buildings, and Heysham, near Lancaster.
	7th March, 1850.	Birch, Sir Thomas Bernard, Bart., The Hazles, Prescot.
	23rd Nov., 1848.	Birchall, Lieut.-Col. Thomas, Ribbleton hall, Preston.
	4th March, 1852.	Birley, Rev. John Shepherd, Moss Lea, Bolton-le-Moors.
P.	8th Jan., 1852.	Birley, T. Langton, Carr hill, Kirkham.
	23rd Nov., 1848.	Blackburne, John Ireland, The Hall, Hale.
	20th Sept., 1854.	Blackmore, William, Carshalton, Surrey.
	23rd Nov., 1848.	*Blundell, Thomas Weld, Ince Blundell hall, Great Crosby.
	1st May, 1856.	Booth, John Billington, Overleigh house, Preston.
	15th Dec., 1853.	Bossi, Arthur, Paris.
	3rd Jan., 1856.	*Bouch, Thomas, 1, Oldhall street, and New Brighton.
P.	23rd Nov., 1848.	*Boult, Joseph, F.R.I.B.A., Exchange buildings West, and Parkfield road, Aigburth road.
	8th Dec., 1851.	Bourne, Cornelius, Stalmine hall, Preston.
	15th April, 1858.	*Bower, Anthony, Vauxhall foundry, & Seaforth.
	6th Dec., 1855.	Bowes, John, Blue Coat School, Warrington.
	3rd Dec., 1868.	Boyle, Henry, Ella House, Ambleside.
P.	12th Dec., 1867.	Boyle, Frederick, F.R.G.S., Pennant's house, Bebington.
	13th Nov., 1851.	Brackstone, R. H., Lyncombe hill, Bath.
	17th Dec., 1857.	*Bradley, William Gibson, 52, Bold street.
	Mayor Liv., 1848-9.	*Bramley-Moore, John, Hon. Mem. Archæol. Association, Aigburth.
	30th Dec., 1854.	Brent, Francis, Custom house, Plymouth.
P.	7th May, 1863.	*Bright, E. B., 2, Exchange buildings, and Waterloo.
P.	9th March, 1854.	*Bright Henry Arthur, A.M., Fairfield, and 1, North John street.
	4th Feb., 1864.	Bright, Sir Charles Tilston, M.P., C.E., F.R.S., 12, Hyde park gardens, London.
	3rd May, 1849.	Brooke, Henry, Forest hill, Northwich.

6th Mar., 1851. *Brooke, Sir Richard, Bart.*, Norton priory, Runcorn.

20th Feb., 1868. Burgess, Rev. W. R., B.A., Latchford, Warrington.

6th Feb., 1868. Brooks, William Cunliffe, M.P., Barlow Hall, near Manchester.

1st Nov., 1866. Brooks, William Murray, St. James's Schools, Accrington.

17th Sept., 1854. Burnell, Rev. Samuel, A.M., Winwick, Warrington.

P. 15th Dec., 1853. *Buxton, David, F.R.S.L., Principal of the Liverpool Deaf and Dumb Institution, Oxford street, Hon. Secretary.

C

23rd Nov., 1848. *Caine, Nathaniel, 12, Dutton street.

3rd Dec., 1857. *Calder, Rev. William, A.M., Fairfield.

1st Dec., 1859. Callender, W. Romaine, jun., F.S.A., Ashburne house, Rusholme, Manchester.

P. 6th Dec., 1855. Calvert, F. Crace, Ph. Dr., F.R.S., F.C.S., M.R.A. Turin, Chemical Works, Gibson street, Bradford, near Manchester.

23rd Nov., 1848. *Campbell, Rev. Augustus, A.M., the Vicarage, Childwall.

18th Dec., 1856. *Campbell, Wm., Captain & Adjutant R.L.M.A., Artillery barracks, Rupert lane.

3rd Dec., 1868. *Cape, John, 22, North street.

3rd Dec., 1857. *Chadburn, Charles Henry, 71, Lord street, and Egremont, Birkenhead.

H. Sh. Chesh., 1855-6. *Chapman, John*, Hill End, Mottram-in-Longdendale.

14th April, 1859. *Clement, Leonard*, Nelson-in-Marsden, near Burnley.

24th May, 1855. *Comber, Thomas*, Hargreaves buildings, Chapel street.

4th March, 1858. Crawford and Balcarres, Right Hon. the Earl of, Haigh hall, Wigan.

6th Dec., 1849. *Crosfield, Henry, 4, Temple place, and Aigburth

23rd Nov., 1848. Crosse, Thomas Bright, Shawe hill, Chorley.

2nd May, 1850. Crossley, James, F.S.A., President of the Chetham Society, 6, Booth street, Piccadilly, Manchester.

P. 23rd Nov., 1848. *Cust, General the Hon. Sir Edward, K.C.H., D.C.L., Leasowe Castle, Cheshire.

D

23rd Sept., 1854. *Davies, Comenius, 8, Kinglake street, and Borough Engineer's Office, Dale street.

23rd Nov., 1848. **Dawson*, *Henry*, 30, Redcross street, and 14, St. James's road.

P. 2nd May, 1850. *Dawson, Thomas, M.R.C.S. Eng., 26, Rodney st.

6th Mar., 1862. *Derby, Right Hon. the Earl of*, Knowsley hall, Lancashire, and 23, Saint James's square, London, S.W.

23rd April, 1857. *Devonshire, His Grace the Duke of*, K.G., D.C.L., F.R.S., Chatsworth, Derbyshire, and Devonshire house, London.

E

9th Dec., 1852. *Eckersley, Thomas*, Wigan.

6th Mar., 1862. *Edwards, Edward, Adelaide buildings, Chapel street, and Holly lodge, Fairfield.

6th Mar., 1862. Egerton, Hon. Algernon, M.P., Worsley Old hall, Manchester.

7th Jan., 1851. *Egerton, Hon. Wilbraham*, M.P., Rosthern hall, Knutsford.

6th Mar., 1862. *Egerton of Tatton, Rt. Hon. the Lord*, Tatton park, Knutsford.

23rd Nov., 1848. *Egerton, Sir Philip de Malpas Grey*, Bart., M.P., F.R.S., F.G.S., Oulton park, Tarporley.

9th Jan., 1868. *Ellerbeck, J. T., Bold street.

12th Dec., 1867. *Elsby, Miles Pilling, Bebington.

23rd Nov., 1848. *Evans, Edward, 56, Hanover street.

P. 4th Nov., 1858. *Evans, Edward Francis, Revenue buildings.

F

3rd Dec., 1857. Fairbairn, Sir William, Bart., D.C.L., F.R.S., Manchester.

ffarrington, Miss, Worden Hall, Preston.

23rd Nov., 1848. *Finlay, William, Liverpool College, and Shaw street.

P. 15th April, 1858. *Forrest, J. A., 58, Lime street, and 5, Charlesville, Claughton, Birkenhead.

7th May, 1857. *Frackelton, Rev. S. S.*, A.M., Ballynahinch, Ireland.

15th Dec., 1853. *Franks, Augustus Woollaston*, A.M., F.S.A., British Museum, London.

7th Jan., 1858. Frost, Meadows, 25, The Albany, Oldhall street, and St. John's house, Chester.

G

14th Dec., 1848. *Gardner, Richard Cardwell, Colonial buildings, 34, Dale street, and Croxteth road.

3rd May, 1849. Garnett, Wm. J., Quernmore park, Lancaster.

23rd Nov., 1848. *Gaskell, John Rooth, Exchange court, Exchange street East.

11th April, 1867. *_Genn, John Hawke_, 18, Mersey road, Rock Ferry.

18th Dec., 1856. *Gerard, Henry, 10, Rumford place.

P. 1st May, 1862. *Gibson, J. H., 144, Vauxhall road.

P. 5th Nov., 1863. *Gibson, Thomas, 51, Oxford street.

6th March, 1862. _Gladstone, Right Hon. W. E._, M.P., 11, Carlton house terrace, London, S.W.

4th Dec., 1862. *Goodier, Thomas, 110, St. Domingo vale, and 6, Lord street.

19th Dec., 1852. *Graves, Samuel Robert, M.P., 13, Redcross street, and The Grange, Wavertree.

6th Feb., 1851. Gray, Lieut.-Colonel, M.P., Darcy Lever hall, Bolton.

4th Dec., 1862. Green, John Henry, Buenos Ayres.

16th Sept., 1854. Greene, John Stock Turner, Adlington hall, Chorley.

31st Aug., 1854. Grenside, Rev. William Bent, A.M., Melling Vicarage, Lancaster.

19th Mar., 1857. *Grimmer, W. Henry, Prince's buildings, 30, North John street.

H

1st Dec., 1864. *Haigh, Thomas, 47, Boundary lane.

21st May, 1857. *Hall, Charlton R., 19, Dale street, and Liscard castle, Birkenhead.

10th Dec., 1857. *Hancock, Thomas S., Sweeting street, and Birkenhead.

P. 6th Mar., 1856. Hardwick, Chas., 148, Embden street, Hulme, Manchester.

12th Jan., 1854. _Harrison, Wm._, F.S.A., F.G.S., F.R.S. North. Antiq., &c., Samlesbury hall, Preston; Conservative Club, St. James's, S.W.; and R.T.Y. Club, Albemarle street, W.

9th Feb., 1864. _Harrowby, Rt. Hon. the Earl of_, D.C.L., F.R.S., Sandon hall, Staffordshire, and 39, Grosvenor square, London.

23rd April, 1857. _Hartington, Most Hon. the Marquess of_, M.P., Chatsworth, Derbyshire, & Devonshire house, London.

P. 11th Oct., 1854. *Hartnup, J., F.R.A.S., Observatory, Bidston, Birkenhead.

8th Dec., 1864. Heald, Thomas, Greenfield, Billinge, Wigan.

27th Sept.,1854. *Healey, Samuel R., 7, Dale street, and Westbank, Woolton.

24th Oct., 1854. Heginbottom, George, Birkdale park, Southport.

2nd April, 1868. *Hewitt, James, 1, Dover street.

23rd Nov., 1848. *Heywood, James*, F.R.S., F.S.A., F.G.S., 26, Kensington Palace Gardens, London, W.

23rd Sept., 1854. *Hindmarsh, Fred.*, F.G.S., F.R.G.S., 4, New Inn, Strand, London, W.C.

12th Jan., 1860. *Holden, Adam, 48, Church street.

18th Jan., 1866. *Holden R., 57, Dale street.

18th Dec., 1856. *Holden, Thomas*, Springfield, Bolton.

24th Sept., 1854. *Holt, William D., 23, Edge lane.

23rd Nov., 1848. *Horsfall, Thomas Berry, Bellamour hall, Rugeley, Staffordshire.

6th Dec., 1860. *Houghton, James, 84, Rodney street.

14th April, 1853. **Houghton, Richard H.*, Sandheys, Waterloo.

4th Dec., 1856. *Howell, Edward, 26, Church street.

Mayor Lan., 1849-50. Howitt, Thomas, Lancaster.

P. 8th Nov., 1849. *Howson, Very Rev. John Saul, D.D.*, The Deanery, Chester.

27th Sept., 1854. *Hubback, Joseph, 1, Brunswick street, and Rodney street

P. 10th Dec., 1857. *Hughes, John R., 17, Tower chambers.

6th April, 1854. Hughes, Thomas, 2, Groves terrace, Chester.

8th Feb., 1862. Hulton, William Adams, Hurst grange, Preston.

Mayor Ch. 1851-52. Humberston, Philip Stapleton, Chester.

P. 23rd Nov., 1848. **Hume, Rev. Abraham*, D.C.L., LL.D., F.S.A., F.R.S. North. Antiq. Copenhagen, Corr. Mem. S.A. Scot., Hon. Mem. of the Society of Antiquaries, Newcastle-upon-Tyne, 6, Rupert lane, President.

21st May, 1857. *Hume, Hamilton*, F.R.G.S., Cooma, Yass, New South Wales.

10th Feb., 1870. Hyde, John, Hesketh street, Southport.

J

1st April, 1852. *Jacob, John Gibborn, 56, Church street, Treasurer.

5th Dec., 1861. Jackson, William, Fleatham house, St. Bees.

23rd Nov., 1848. Jacson, Charles R., Barton hall, Preston.

P. 2nd May, 1861. *JEFFERY, F. J., 45, Church street, and Woolton hall.

21st May, 1857. *Jeffery, James Reddecliffe, 45, Church street, and Woolton hall.

23rd Nov., 1848. *Johnson, John H., 7, Church street, and Southport.

23rd Sept., 1854. Jones, Edward, The Larches, Handsworth.

3rd May, 1849. *Jones, Morris Charles, 20, Abercromby square.

2nd Dec., 1858. *Jones, Robert, 7, Batchelor street.

6th Dec., 1849. *Jones, Roger L., Sunnyside, 1, Belvidere road, Prince's park.

15th Sept., 1854. Jones, Thomas, B.A., F.S.A., Chetham Library, Manchester.

11th Dec., 1856. Jones, W. Hope, Hooton, Chester.

9th Jan., 1868. Jones, Rev. Charles, Rock Ferry.

K

P. 3rd May, 1849. Kendrick, James, M.D., Warrington.

P. 5th March, 1868. *Kilpin, J. T., Trafford chambers, 58, South John street, and 6, Grove street.

4th Dec., 1862. *King, Lieut.-Col. Vincent Ashfield, 18, Tower chambers, and Point of Ayr, Oxton.

5th Nov., 1863. *King, John Thomson, Clayton square.

L

6th March, 1862. *Laird, John, M.P., Hamilton square, Birkenhead.

23rd Nov., 1848. Langton, William, —— Bank, Manchester.

Leigh, Miss, The Limes, Hale.

23rd Nov., 1848. Legh, G. Cornwall, M.P., High Legh, Knutsford.

1st Dec., 1859. *Legh, W. J.*, M.P., Lyme park, Disley, Stockport.

10th Dec., 1857. *Leigh, Major Egerton*, The West hall, High Leigh, Knutsford.

1st Nov., 1866. *Lilley, John H., H.M. Customs, Revenue buildings.

M

6th Mar., 1862. McCorquodale, Lieut.-Colonel G., Newton-le-Willows.

15th April, 1858. *McInnes, J., 23, Lightbody street.

27th Sept., 1854. *Macfie, Robert Andrew, M.P., 30, Moorfields, and Ashfield hall, Neston.

23rd Nov., 1848. M'QUIE, PETER ROBINSON, 9, Brunswick street, and Thornton lodge, Merton road, Bootle, VICE-PRESIDENT.

5th May, 1853. *_Macrae, John Wrigley_, 32, Hackin's hey, and Seaforth house, Seaforth.

23rd Nov., 1848. *Marsden, George, Old Churchyard, and Vernon priory, Edge hill.

1st Dec., 1859. Marsh, John, Rann lea, Rainhill.

P. 5th June, 1851. MARSH, JOHN FITCHETT, Fairfield house, Warrington.

1st Dec., 1864. Marson, James, Warrington.

1st Dec., 1864. *Mathews, John, Highfield, Rock Ferry, Birkenhead.

6th Mar., 1862. *MATHISON, WILLIAM, 11, Dale street.

P. 23rd Nov., 1848. *MAYER, JOSEPH, F.S.A., M.R. Asiat. S., F.E.S., F.R.S. North. Ant. Copenhagen, Associé étranger de la Société Impériale des Antiquaires de France, Hon. Mem. SS. Anti., Normandie, l'Ouest, la Morinie, Société d'Emulation d'Abbeville, &c., 68, Lord street, VICE-PRESIDENT.

7th Dec., 1865. *Miller, Henry, Toxteth dock.

2nd Jan., 1862. *Milligan, James, jun., Eldwood End, Grassendale, Aigburth.

21st Feb., 1861. Mills, John, Middle School, Warrington.

20th May, 1860. Mills, Robert, F.S.A., F.G.S., 27, Promenade, Rochdale.

P. 21st Dec., 1854. *Milner, William, Bentley road, and Phœnix Safe Works, Windsor.

3rd Dec., 1857. Moore, Rev. Richard R., A.M., St. Anne's, Eccleston, St. Helens.

P. 8th Nov., 1849. Moore, Rev. Thomas, A.M., Midleton College, County of Cork.

P. 23rd Nov., 1848. *Moss, Rev. John James, LL.D., East Lydford Rectory, Somerset.

3rd Dec., 1863. Moubert, Adolphus, Garswood-Ashton, Warrington.

3rd Dec., 1857. Moult, William, 21, Leigh street, and Knowsley.

11th Dec., 1856. Myres, John James, Bank parade, Preston.

N

H. S. Ches. 1857. *Naylor, Richard*, Hooton hall, Chester.

P. 1st Nov., 1866. Newbigging, Thomas, Bacup.

19th Mar., 1863. Newsham, Richard, Preston.

23rd Nov., 1848. Nicholson, James, F.S.A., Thelwall hall, Warrington.

29th Sept., 1854. *Nottingham, John, M.D., F.R.A.S., F.R.S. Northern Antiquaries, Copenhagen, 20, Roscommon street.

O

P. 6th Dec., 1849. Ormerod, George, D.C.L., F.R.S., F.S.A., F.G.S., Sedbury park, Chepstow.

3rd Jan., 1850. *Overend, James, 55, Hope street.

3rd Dec., 1857. Oxley, Frederick, 6, Hungerford rd., London, N.

P

23rd Nov., 1858. *Paris, Thomas Jeremiah, 68, Lord street.

18th Dec., 1856. Parker, Robert Townley, Cuerdon hall, Preston.

7th Mar., 1850. *Patten, Right Hon. John Wilson*, M.P., Bank hall, Warrington.

6th Dec., 1849. Pearce, George Massie, Hackin's hey, and Ormskirk.

11th Dec., 1856. *Pedder, Henry Newsham*, 9, Queen's gate, Prince Albert road, South Kensington, London, S.

1st Dec., 1864. Perry, Rev. S. G. F., M.A., Incumbent of Tottington, near Bury.

21st March, 1860. **Petty, Thomas Shaw*.

12th Dec., 1867. Pickering, James, Fisher house, Orrell, near Wigan.

P. 6th Jan., 1849. *Picton, James Allanson, F.S.A., Queen Insurance buildings, Dale street, and Sandyknowe, Wavertree.

3rd May, 1849. Pierpoint, Benjamin, St. Austin's, Warrington.

23rd Nov., 1848. Pilkington, James, Park pl. House, Blackburn.

10th Feb., 1853. *Platt, Robert*, Stalybridge.

1st Dec., 1864. *Porter, John, Clayton square.

12th March, 1857. *Preston, Geo. Theo. Robert, 13, Vernon street, Dale street, and Belmont house, Belmont rd.

6th Dec., 1849. *Preston, William, 13, Vernon street, and Ellel Grange, near Lancaster.

14th Jan., 1864. *Priest, Thomas E., Clarendon rooms, South John street.

R

15th March, 1849. Rawlinson, Robert, C.B., C.E., F.G.S., Sanitary Commissioner, Local Government Act Office, 8, Richmond terrace, Whitehall; and Lancaster lodge, Boltons, West Brompton.

13th Sept., 1854. *Raynes, James Trevelyan, 37, Oldhall street, and Rock park, Rock Ferry.

29th Dec., 1854. Rees, William, Old Trafford, Manchester.

3rd Dec., 1863. Rhodocanakis, Captain H.H. the Prince, Manchester.

20th Dec., 1855. Robin, Rev. P. R., A.M., Woodchurch, Birkenhead.

23rd Nov., 1848. *Robinson, Charles Backhouse.

1st Dec., 1864. *Robinson, John, 41, Lord street.

3rd Jan., 1850. *Ronald, Robert Wilson, 19, Dale street.

15th April, 1858. Rooke, Rev. W. J. E., M.A., Tunstal Vicarage, Kirby Lonsdale.

15th April, 1858. Rowlinson, W., Windermere.

25th Sept., 1854. Rylands, Peter, M.P., Bewsey house, Warrington.

P. 13th Dec., 1854. RYLANDS, THOMAS GLAZEBROOK, F.L.S., F.G.S., Warrington, VICE-PRESIDENT.

S

6th Dec., 1855. *Sandbach, W. R., Bank buildings, Cook street, and The Cottage, Aigburth.

P. 7th Sept., 1851. Sansom, Thomas, F.B.S.E., Custom House, Newcastle-on-Tyne.

8th Jan., 1852. Sharp, John, The Hermitage, Lancaster.

23rd Nov., 1848. Sharpe, Edmund, A.M., Cwm Alyn, Llanrwst, North Wales.

2nd June, 1853. *Sharpe, William*, 102, Piccadilly, London.

23rd Nov., 1848. *Simpson, Rev. Samuel*, A.M., The Greaves, near Lancaster.

P. 16th April, 1863. *SMITH, HENRY ECROYD, Aldboro' house, Egremont, Birkenhead.

2nd May, 1850. **Smith, James*, Berkeley house, Seaforth.

16th Sept., 1864. Smith, John, Langley, near Macclesfield.

20th Feb., 1868. Smith, Samuel, jun., 8, Croxteth road, Prince's park.

12th Mar., 1863. *Squarey, Andrew Tucker, Gorsey Hey, Higher Bebington, and Dock Office.

2nd Nov., 1854. Stainer, William, Old Trafford, Manchester.

3rd Jan., 1856. *Staniforth, Rev. Thomas*, M.A., Storrs, Windermere.

5th Feb., 1863. Steele, Alexander, Ph.Dr., Bay View house, The Crescent, Douglas, Isle of Man.

13th Dec., 1855. *Steiner, F.*, Hyndburn, Accrington.

4th Mar., 1852. *Sykes, James, 115, Dale street, 78, Rodney street, and Breck house, Poulton-le-fylde.

T

18th Nov., 1869. *Thomas, George, Lord street.

18th Feb., 1858. *Thompson, Henry, 153, Upper Parliament st., and 11, North John street.

13th Sept., 1854. *Thornley, Samuel, Deane road, Fairfield.

17th Jan., 1867. *Thorp, Henry*, Whalley Range, Manchester.

P. 8th Dec., 1851. *Tinne, John A., F.R.G.S., Briarley, Aigburth.

8th Jan., 1852. *Torr, John, 15, Exchange buildings West, and Eastham.

H.S. Lanc., 1857. Towneley, Charles, Towneley, Burnley.

P. 2nd April, 1857. *Towson, John Thomas, F.R.G.S., 47, Upper Parliament street, and Sailors' Home.

14th April, 1863. *Turner, Charles, M.P., 4, Lancelot's hey, and Dingle head.

27th Sept., 1854. *Turner, John Hayward, 23, Abercromby square.

6th Dec., 1849. Turner, Edward, High street, Newcastle, Staffordshire.

U

8th Mar., 1854. Underwood, Rev. Charles W., A.M., Histon Vicarage, Cambridge.

V

23rd Nov., 1848. **Varty, Thomas*, Stag-stones, Penrith.

16th Dec., 1869. Vaudrey, Benjamin Llewellyn, Tushingham hall, Whitchurch.

14th April, 1853. *Vose, James, M.D., 5, Gambier terrace, Hope street.

W

Myr. C. 1838-39, 48-49. *Walker, Sir Edward Samuel*, Berry hill, Mansfield, Notts.

11th Dec., 1856. *Walmsley, Thomas*, Preston.

Dec. 3rd, 1868. *Walthew, J. M., 1, Tower chambers, and 30, Percy street.

12th Dec., 1867. *Walmsley, Gilbert G., Lord street.

6th Mar., 1851. Warburton, Rowland Eyles Egerton, Arley hall, Cheshire.

21st May, 1857. Ward, John Angus, Hooton Lodge, Chester.

3rd May, 1864. *Waterhouse, John Dockray, 1, Oldhall street.

P. 5th Dec., 1861. *Waterhouse, Nicholas, Rake lane.

17th Dec., 1857. Watts, Sir James, Manchester.

2nd May, 1850. *Way, Albert*, A.M., F.S.A., Wonham manor, Reigate, Surrey.

1st Feb., 1849. *Webster, George, 6, York buildings, Dale street, and Mossley hill, Aigburth.

P. 3rd Jan., 1856. *Welton, Thomas A.*, F.S.S., 91, Mortimer road, De Beauvoir square, London, N.

	13th Mar., 1862.	Westminster, Most Noble the Marquess of, 33, Upper Grosvenor street, London, and Eaton hall, Chester.
	2nd June, 1853.	*Whitley, George, 5, Clayton square, and Bromborough.
	9th Oct., 1854.	Whitley, Rev. John, A.M., Newton rectory, Newton-le-Willows.
	6th June, 1850.	Whitley, Rev. William, B.A., Catsclough, Winsford, Cheshire.
P.	30th Nov., 1854.	Wilkinson, Thomas Turner, F.R.A.S., Corr. Mem. Lit. and Phil. Soc. Manch., Burnley.
	14th Feb., 1861.	Wilson, J. M., Hardshaw street, St. Helens.
	13th Nov., 1866.	*Winder, Thomas, Coniston House, Walton.
	23rd Nov., 1848.	Wood, Isaac Moreton, Newton, near Middlewich.
	7th Dec., 1865.	*Wood, R. H.*, F.S.A., F.R.G.S., Mem. Corr. Soc. Antiq. de Normandie, Crumpsall, Manchester.
	7th May, 1855.	**Woodhouse, John George*, Bronte House, Everton Valley.
	14th May, 1868.	*Wordley, W. G., 15, Sweeting street.

HONORARY MEMBERS.

	6th Feb., 1851.	Akerman, John Yonge, Hon. M.R.S.L.; F.S.A. Newcastle; F.R.S. of Northern Antiquities; Corr. Mem. SS. Antiq. Scot., France, Russia, Switzerland, Rome; Hon. Mem. Roy. Acad., Stockholm; London.
	27th Sept., 1854.	Babington, Charles Cardale, A.M., F.R.S., F.S.A., F.L.S., Professor of Botany, Cambridge.
	6th Feb., 1851.	Blaauw, William Henry, A.M., F.S.A., Beechland, Uckfield.
	1st Nov., 1860.	Brown, James, New York, U.S.A.
	6th Feb., 1851.	Charlton, Edward, M.D., F.S.A. Newc., 7, Eldon square, Newcastle-upon-Tyne.
P.	1st Feb., 1855.	Clarke, Joseph, F.S.A., Saffron Walden, Essex.
	19th May, 1859.	Cochet, M. L'Abbé, Inspector of Antiquities and Monuments in Normandy, Dieppe.
	27th Sept., 1854.	Gray, John Edward, Ph.D., F.R.S., F.L.S., &c., British Museum, London.
P.	27th Sept., 1854.	Latham, R. Gordon, M.D., F.R.S., 99, Disraeli road, Putney, London.

9th Dec., 1852. MacAdam, Robert, 18, College square East, Belfast.

27th Sept., 1854. Murchison, Sir Roderick Impey, G.C. St. S., A.M., D.C.L., F.R.S., V.P.L.S., F.G.S., P.R. Geogr. S., Hon. M.R.I.A., Director-General of the Geological Survey of Great Britain and Ireland; Trust. Brit. Mus.; Hon. Mem. Acadd. St. Petersburgh, Berlin, Copenhagen; Corr. Mem. Inst. France, &c., 16, Belgrave square, London.

27th Sept., 1854. Owen, Richard, M.D., LL.D., F.R.S., F.L.S., F.G.S., British Museum, London.

P. 7th May, 1851. Pidgeon, Henry Clarke, 10, St. Leonard's terrace, Maida hill West, London.

27th Sept., 1854. Phillips, John, M.A., LL.D., F.R.S., F.G.S., Professor of Geology, and Keeper of the University Museum, Oxford; Hon. Mem. Imp. Acad., Moscow; Société Vaudoise, &c., Oxford.

27th Sept., 1854. Sabine, General Sir Edward, R.A., D.C.L., LL.D., Pres. R.S., F.R.A.S., 13, Ashley place, London, S.W., and Woolwich.

27th Sept., 1854. Sedgwick, Rev. Adam, A.M., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Woodwardian Professor, Trinity College, Cambridge.

P. 6th Feb., 1851. Smith, Charles Roach, F.S.A., Member of the Roy. Soc. North. Antiq. Copenhagen, Hon. Mem. SS. Antiq., France, Normandy, Scotland, Spain, Newcastle, the Morinie, Abbeville, Picardy, Wiesbaden, Luxemburg, Treves, Touraine, &c., Temple place, Strood, Kent.

6th Feb., 1851. Willis, Rev. Robert, A.M., F.R.S., Jacksonian Professor, Cambridge, and 23, York terrace, Regent's park, London.

P. 27th Sept., 1854. Wright, Thomas, A.M., F.S.A., Hon. M.R.S.L., Member of the Institute of France; of the Roy. Soc. North. Antiqs. Copenhagen; Hon. Mem. of the Soc. of Antiquaries of France; Corresp. Mem. Soc. Antiq. Normandy; of Soc. Antiqs. Scotland, &c., 14, Sydney street, Brompton, London.

Walcott, Rev. Mackenzie E. C., M.A., B.D., M.R.S.L., F.S.A., &c., Precentor and Prebendary of Chichester, 58, Belgrave road, London, S.W.

Presidents since commencement.

1. Right Hon. Francis, 1st Earl of Ellesmere, Lord-Lieut. of Lancashire - 1848.
2. Right Hon. Charles William, 3rd Earl of Sefton, Lord-Lieut. of Lanc. - 1854.
3. General The Hon. Sir Edward Cust, K.C.H., D.C.L. - - - - 1855.
4. Right Hon. William Ewart Gladstone, M.P. - - - - - - 1863.
5. Joseph Mayer, F.S.A., &c. - - - - - - - - - - 1866.
6. Rev. A. Hume, D.C.L., LL.D., &c. - - - - - - - - 1869.

Secretaries since commencement.

1848. Rev. A. Hume, LL.D., &c., and H. C. Pidgeon, Esq.

1851. Rev. A. Hume, LL.D., &c., and Rev. Thomas Moore, M.A.

1854. Rev. A. Hume, LL.D., &c.

	Assistant Secretaries.
1855. Rev. A. Hume, LL.D., &c.	Thomas G. Wedgwood, Esq.
1856. Rev. A. Hume, LL.D., &c.	W. W. Rundell, Esq.
1857. Rev. A. Hume, LL.D., &c.	J. H. Genn, Esq.
1864. Nicholas Waterhouse, Esq.	J. H. Genn, Esq.
1867. David Buxton, F.R.S.L.	Charles Dyall, Esq.

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1848. Thomas Avison, F.S.A.

1860. William Burke, Esq.

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Librarian.	*Curator.*
1848. Joseph Mayer, F.S.A.	Joseph Mayer, F.S.A.
1851. Rev. Thomas Moore, M.A.	Joseph Mayer, F.S.A.
1859. David Buxton, F.R.S.L.	A. C. Gibson, F.S.A.
1867. Nicholas Waterhouse, Esq.	A. C. Gibson, F.S.A.
1869. Nicholas Waterhouse, Esq.	H. Ecroyd Smith, Esq.

TRANSACTIONS.

ADDRESS
TO THE MEMBERS OF THE HISTORIC SOCIETY OF LANCASHIRE AND CHESHIRE.

By Joseph Mayer, F.S.A., &c., &c., President.

Read 5th November, 1868.

In the past year, gentlemen, when you chose me President of your Society, I had the pleasure of thanking you in this room for an honour which I value very deeply; and this evening I cannot do more than reiterate the acknowledgments then made. I am conscious that I have not been so active, nor so punctual in attendance, as your President should be; but most of you here know well how various are the duties which compel my absence from your meetings. I am thus doubly affected by the proof of confidence you gave me some days ago, because it shows that, for all my shortcomings, the Historic Society understands that my heart is still with it, though in bodily presence I be elsewhere engaged. Were I to set before you now the divers causes which have thrown my proper duties into the hands of others, I feel sure you would sympathize with and pardon me. They were indeed imperative, and I can but beg your leniency to excuse a disrespect which was unavoidable. If there be any here who should feel an interest, and a very deep interest, in the Historic Society, it is its President; not merely for the honour and dignity of the office he holds, but also for the recollection that he was among the first to form the idea of such a society, and among the first to put that idea into a practicable shape. In the body of gentlemen round me to-night, I see

the representatives, I might say heirs, of those personal friends who established this institution,—an institution, be it remembered, almost the earliest of its kind in the North of England. To find myself chosen President of such a body was a very keen pleasure; and your vote at the last meeting, which confirmed me in office for another year, was yet more grateful, for the reason I have alluded to. For such a mark of confidence, gentlemen, I thank you very heartily.

In the two addresses which I read to this society last year, I dwelt most especially upon the antiquarian interests of our own country; ground rather dangerous to tread, unless one be prepared to engage in a score of friendly controversies, which I, a busy citizen, have not leisure to undertake. Nevertheless, the correspondence which the second of those papers, in particular, drew upon me, was very encouraging. Independently of the arguments for or against my views contained therein, which, as a simple seeker after truth, I could weigh with pleasure and profit though they failed to convince, it showed that the old fanaticism, which rejected all things strange and novel, merely as such, was dying out, or had learned to be ashamed of its obtrusion. There were those among my correspondents whose course of reading, or natural bent, led them to dissent from my opinion on this matter or that, but the mass, or rather the entirety, showed a comprehension of the points at issue, and an interest in the theory, which was to me as surprising as it was gratifying. I hope, and indeed feel sure, that this intelligence, this newly-wakened regard for the subjects of our study, is not to be considered solely characteristic of our town or county, but rather as a tendency of the whole kingdom, from which one may expect the very highest benefit to science, to social knowledge, ay, and to religion, in the course of its expansion. Everywhere we see what a strengthening grasp our pursuits are taking on

the national mind. Especially we see it in the eagerness with which the press takes up any complaint of neglect to local monuments. Let but a cross fall in the desert cemetery of Icolmkill, and the *Times* opens its arms to the anonymous avenger, and boldly in its own name denounces the whole Clan Campbell and the great Mac Callum Mhor. If a whisper circulate that the worst of England's kings is about to be disturbed in his mouldering tomb, a thousand eyes are sternly fixed upon the spot; and did the workmen only wink, there are those prepared to publicly reprimand them for the sacrilege. There is a fire at Croydon Church, and the columns of the Thunderer are freely thrown open to architects, amateurs, and defenders of the Whitgift Hospital, all somehow advocating the restoration of its monuments. Jerusalem, I am told, resembles a newly-projected line of railway, owing to the enthusiastic exertions of Lieut. Prideaux and his fellow-labourers; and very shortly, I hope, an equal stir will be created on Mount Sinai.

But it is not only in the exploration of foreign countries, nor in the prosecution of studies that may be called European in interest, that this spirit shows itself. Scarcely is there a Parish, certainly not a Hundred,—to use the old English measure,—which has not found its profit in the new Renaissance. On every side we see persons, well-meaning and enthusiastic, if not always quite judicious, who devote their time and pains and money to the task of rebuilding or restoring some one among the memorials of antiquity which lie to the hand of every one in our ancient fatherland. It is a prospect most cheering to the mature Archæologist, who—if he must from time to time regret to see the signs of haste and ignorance in undertakings that, above all others, should be well studied, carefully overlooked, and most tenderly carried through—must still be alike charmed and astonished to observe the strides his favourite science has taken of late

years, among all classes of Englishmen. He rejoices to feel confident that henceforward they are safe, those grey memorials of other ages, those nodding ruins, those ancient churches, where our forefathers alone found peace among the dire convulsions which environed them without. He sees that every stone and beam that has a story, every mouldering tree to which a legend hangs, will be safe henceforth, and that, not by the careless, and oftentimes injudicious, liberality of some great man, but preserved by the tender sentiment of a nation. And this pleasant security has come to him in latter years, consoling him for many disappointments and regrets.

It seems to me that the archæologist has especial reason to congratulate himself upon the line of study he has embraced, in troublous times such as those in which we are now living. A grave political change has lately transferred the power of this realm to a class hitherto most carefully excluded from authority. A measure of the highest interest to religion is now under discussion, a measure that has roused men's deepest feelings, and is intimately bound up with those abstract principles of government on which European monarchies are based. Simultaneously with these momentous novelties, either as a cause or an effect of them, a hundred social problems have suddenly pressed themselves into notice, and demand instant attention. This is not a political society, nor should your President proclaim his creed, whatever it may be, from this chair. I do not say whether I approve, or whether I dread, those changes which the near future holds before us. But in any case, under any form of conviction, the intelligent and thoughtful archæologist finds comfort. In the grave retirement of his study he has watched and weighed the mutations of humanity, from that earliest struggle of man with man, when the material and the spiritual first found themselves face to face, enemies from the beginning. He has seen the right prevail, and become the wrong in its

success; he has seen crime triumphant, and the cause of humanity flourishing under its shadow, in its despite. He knows, as no other student can know, with what strange weapons the progress of his kind has been protected. Gods rise and fall in his comprehensive survey; nations are lifted up, and swamped beneath the flood of barbarism; arts die without disease, and spring again without miracle. He sees licentious republics crushed, to flourish in a despotism; and despotism nobly broken, to the glory of free manhood. Until at length the conviction grows upon his mind that our forms are nought, our efforts unessential, and our accidents of no effect. There is a vaster law at work than mortal intelligence can grasp, a law which moves without our knowledge or will, a law so deep and majestic that the review of all generations since history began is but to the student as that fragment of a comet's untraceable orbit which the astronomer may measure out but cannot turn to use. There is a faith the archæologist learns, with wonder and delight, in the calm solitude of his study; a faith wider than all dogmas, and higher than all reasoning; faith in the ultimate destinies of his kind. One great man, one great race, sins and passes; another merits, and passes likewise; either the good or the evil seem to have been alike wasted and without result. But from every degradation humanity has mounted higher, from every sleep has wakened to a larger vitality. The foremost axiom of mechanics is as true of the most complex among mechanisms as of the simplest of machines. Man also advances from the complicated to the pure; and every step of his advance our science loves to trace out and meditate. From the elaborate trinities which the priests of Egypt built, to the exquisite idealism of the Greeks, was a step. From this point to the hard and material mythology of ancient Rome was another. And then the world was ready to accept that monotheism which we know. The elaborate governments of the old world,

with their strange subserviencies, and liberties stranger still; their ignorance and their enlightenment; their republics less free than despotisms, and their despotisms more liberal than republics; their confusion of slave and free man; their unity of ecclesiastic with civil life; their abstract rights of the state, their legal rights of the people; their privileges and penalties of a heaven-born aristocracy;—all these complications are so bewildering to our notions, that at this day there are as many theories in explanation of each mystery as there are histories that treat of it. Yet have we in the nineteenth century derived advantage from each one of these past organisations, and still profit by the experience so learned. In this larger view, our science is almost too vast for steady thought, yet one loves to speculate upon those causes,—not indistinct nor too fancifully drawn, though they be almost lost in the mist of ages,—which may yet be producing their effect upon our social order now. Had not the plebs of Rome seceded to the Sacred Hill, should we have been last year discussing the rights of the working class? Had the Gracchi carried through their Agrarian revolution, should we be now face to face with the question of Irish land tenure? And if Rome had held a creed so rounded and uncompromising as do the followers of Zoroaster or Mahomet, would the Irish Church be now a subject of contention throughout our land? These speculations may be novel to some among the younger members here, and useless to prolong, yet I think every scholar would answer them in the negative.

I have said this much to point out how vast, how essential, is the line of study we profess to make our province; a study linked with every interest, every pleasure, every advantage, which, even in this late day, man can enjoy. Consider your science in this comprehensive view, gentlemen, whatever be the special branch of it you take up. Thus treated, Archæology will be found the most perfect system of philosophy that has

yet been meted out. It gives peace and comfort and confidence when trouble overwhelms the land, and it brings with it charity. Whether Mr. Gladstone or Mr. Disraeli prevail, we know, *a fortiori*, that humanity will make progress still; for we have seen through what perils, and how much more deadly than any that now threaten, the unseen, immutable law has steadily pursued its course.

And in regard to this, the most interesting aspect of our science, gentlemen, I should be loth to let slip the opportunity of alluding to that novel museum which our fellow-townsman, Mr. Blackmore, has lately presented to the city of Salisbury. Most here are acquainted with Mr. Blackmore in his professional standing, and many, I hope, are intimate with him as a friend. But it may not be so well known that he is a zealous follower of our pursuits, and that the branch he has especially taken up is that I roughly sketched out a moment since. Feeling more and more interested, as his researches deepened, in those remains which most clearly display man's original rank in the order of creation, and his gradual progress upwards, Mr. Blackmore, some years ago, began to gather evidence from all sides. While travelling in America, he heard that the celebrated museum of Messrs. Squier and Davis was for sale, and, profiting by a strange apathy of public spirit in the United States, he was enabled to secure all the most noteworthy objects which had at that time been discovered in the Western "Mounds." From this nucleus, our fellow-townsman—it gives me pleasure to repeat that description—has been steadily working on, collecting, with unwearied diligence and intelligent liberality, all that enduring testimony of stone and metal which reveals the earlier conditions of our race. All four continents and the Asiatic isles have been laid under contribution for their ancient treasures; and by the side of these are placed such instruments of corresponding simplicity as serve the needs

of savage peoples in our day; so that at the present time, gentlemen, I can assure you from personal knowledge that Mr. Blackmore's museum, illustrating the "age of stone," is not merely the first as most perfect in the world,—alike for its singular wealth and admirable arrangement,—but may even be called the only collection in which it has been hitherto attempted to grasp the whole subject in that detail which the student must require. There is a danger that few collectors in this branch of archæology have avoided, and by their error much undeserved ridicule has been cast at divers times upon their labour. It is — too hasty generalisation. Identical forms of weapon or tool do not prove identical races, nor even a stage of barbarism equally complete. My friend Mr. Thomas Wright, who is an honorary member of this society, was, I think, the first to indicate the unlikelihood of many theories circulated by the Professors of Denmark, and their proselytes among ourselves, at the rise of this new science. And Mr. Blackmore, in the arrangement of his museum, has acted cautiously, not classing celt with celt upon the fact of their common material and similar rudeness or perfection of form, but where the apparent circumstances of their discovery seemed to set them rather among the bronzes, he has not feared to give them room in the place which theory might refuse, but stubborn fact claims for them. In throwing open to the world a collection such as this, Mr. Blackmore has performed an act of national benefit. Nor is his spirit of enquiry yet satisfied; for he is at this moment, I believe, camping on the prairie in pursuit of his researches into the mystery of the "Mounds."

And the mental picture which we may draw of our friend's position to-night,—though I would not attempt to excite your sympathy by dwelling upon its details,—reminds me of a fact that has for some time called my attention; which is—the fast-growing interest and importance of American archæology.

It seems to me part of my duty, as President of a society such as this, to invite the attention of its members to theories that may be forming, or the researches now prosecuted, in any quarter of the world, when they seem to bear upon the larger treatment of our science. And if I be right in this view, America, of all countries, is least to be neglected in our survey. So many and so startling have been the discoveries on that continent in later years, that a movement is actually at work, among the leading antiquaries of North and South alike, which would deny our hemisphere the honour and title of superior antiquity, in favour of their own. The New World, they say, is really the elder of the two, in creation or birth, in conception of life, and in occupation of mankind. While Europe was lost in the blackest night of ignorance and brutality, the Toltec empire flourished in such splendour and contentment as our hemisphere never saw in its brightest days. When Rome was conquering and civilising, the Olmeques and the Quichés cultivated arts, and covered their country with imperishable trophies. While Egypt and Assyria and Greece were struggling to knowledge, the Quinamés erected cyclopean temples and pyramids which endure to this day for a testimony. And beyond all these nations that we know, and times we can identify, in an age so distant that no memory of it dwells now upon the earth, mysterious races lived and laboured and multiplied exceedingly there, in an advanced stage of semi-civilisation. Their works and their fortifications, perhaps their tombs, cover leagues of the Western prairie. A rising town stands easily within *one* of the vast earthworks of Circleville. How dense must that population have been, which could occupy and defend such fortifications! And what a strange condition of human society must have been that in which multitudes were so far enlightened as to combine in these vast undertakings, while content to dwell in huts so poorly fashioned that no vestige of them remains. For there

is not now a trace, so far as I know, of any habitation, and, what is even more strange, scarcely ever has a human bone or mark of interment been observed. But one must admit that such few relics as Mr. Squier has unearthed confirm the national belief in an antiquity almost limitless.

I do not dwell upon this subject, further than to point out how mysterious is the history of this people. The stupendous trophies of their industry stand upon the plain, like the hills or river-beds of other lands. The savage Indian of our day erects his tent in some corner of the huge building, but lays no claim on his ancestors' behalf to the credit of constructing it;* the name or history or fate of the "mound builders" no man can guess.

The same disappointment will be felt by the traveller in exploring the desert of California. In that barren region he finds temples and towers, constructed of hewn stones, and still fit for habitation as when abandoned countless ages since; but there are none to explain their origin. Such as the conquering Spaniards found them, they remain, disclaimed and dreaded now as then by the semi-civilised people who dwell upon the edges of the desert. We may guess that earth-builders and stone-builders moved South or West under pressure of barbarous foes, of famine, of pestilence, or of natural restlessness; but hitherto there has been no evidence available for aught but merest guesses at the earlier stages of American history. The historic period, according to former views,—it may be that a great revolution in this

* The "mound" at Circleville consists of two parts, communicating by a causeway. The circle contains about twenty-five acres, the square leading from it is much larger. Those interested in this subject of the American mounds and their builders will do well to consult Messrs. Squier and Davis's survey of the Mississipi valley, and the Aboriginal Monuments of the former gentleman. It is with some hesitation that I also recommend an extraordinary work, called "*Dee-gov-dah*," by Mr. W. Pigeon. It will be found to contain information of a very startling nature, but the accounts of the mounds, if accurate,—and I do not know that they have been disputed,—are much more complete and copious than any others I have met with.

respect is impending; I shall speak of it presently,—the historic period was formerly fixed about the tenth century, when the Toltec empire was at the zenith of its glory. Commencing the story at that date, we get on smoothly enough for awhile; and even the habitual scoffer, a kind of man of which there are, alas! so many in the world, begins to think there may be "something in it." Suddenly, however, he comes upon a tale of a cock and a bull,—I mean of a devil, a pretty woman, a cup of strong drink, and a monarch bewitched; such a story, in fact, as delighted our innocent minds in the nursery. Should the student's faith survive this startling test, he will find the sober course of history renewed for a few years more, until his author, weary no doubt of dry facts, takes another bold plunge into the spiritual world, and returns to earth with information more marvellous than ever. So the history of Anahuac proceeds, until at length the compiler frankly gives up the attempt to pursue these singular events, and starts afresh at a subsequent date, where, I regret to add, he shortly flounders about as wildly as ever. And the same remark must be made of the Quiché history, and the Maya; as to the story of the Quinamés, there is nothing to be said about it. Nevertheless I am not prepared to disbelieve the entirety of these legends. The story of the Roman kings is as wild, and yet one knows that a great substratum of fact, if not of truth, underlies that fable. In Aztec times the records were kept with a care that might shame Europe, and the historians of that date looked to the extant works of their Toltec predecessors with the same feeling that many of our modern writers have towards Gibbon and Hooker. But of the volumes which were objects of their emulation, how few survive! The Bishop of Quesaltenango, we are told, built up a pile of them as high as his Cathedral and set fire to it. Three days these inestimable treasures burnt! And when a Bishop gives the lead, who but Ritualists

refuse to follow? Every priest, every bigoted haciendero, sought out with curious pains the records in his reach, and utterly destroyed them every one. It was not alone in the middle ages that such senseless vandalism was practised. Up to the beginning of this century, fanatics vied with each other in effacing the memorials of former faith and civilisation. But a few of these books, called codices, were preserved, and found their way at various times into the collections of Europe. It may be also,—I think M. Brasseur de Bourbourg holds out hope of such good fortune,—that a considerable number still remain in the Indians' hands, and in the old libraries of Spain, which will in process of time be given to the public.

It is of these codices that I would say a few words. The character in which they are composed is pictorial, much more so, to my eyes, than the hieroglyphics of Egypt. For ages the art of reading them has been forgotten, or, if still preserved by the Indians,—of which we have no evidence at all,—is most jealously guarded. But for some years the rumour has circulated that M. Brasseur de Bourbourg, an eminent authority,—our only authority in fact, for very much of American history,—possesses the key of these strange characters, or has at least made such progress in deciphering them as gives us reasonable hope for the future. This report he has at length confirmed by the publication of a work,* telling his system, and the circumstances under which he obtained the clue. I have not yet read the book, but if M. Brasseur de Bourbourg has indeed discovered, as I am told, a perfect analysis of the "picture writing," dated within a few years of the Conquest, and now produced under the respectable guarantee of the Royal Librarian at Madrid, we may reasonably hope to obtain information therefrom of most singular interest and value. I cannot tell you upon what principle the

* Quatre letters sur la Mexique. Paris: Maisonneuve. London: Trübner & Co.

pictures are translated, but if M. de Bourbourg be confirmed by this discovery in the view he seems to have taken, following M. Aubin, some years ago, as to their meaning and value, it would appear that the Mexican hieroglyphic was sometimes phonetic and sometimes allegorical, or, as M. Aubin terms it, sometimes formed a rebus.* It will be remembered that the utter uncertainty, and one might almost say inherent improbability, of such a mode of expression, was one of the principal objections to M. Champollion's theory of Egyptian hieroglyphics; and the cause from which has risen such confusion as may be noted in the various translations made according to his system.† I cannot but observe also, that a coincidence "*of the most curious*" will be found, if the antique Egyptian and the ancient Toltec be alike proved to have conceived,—simultaneously and without knowledge of each other,—a mode of recording events, equally ingenious and equally cumbrous, though in characters utterly unlike. But if M. Brasseur de Bourbourg has indeed discovered a new key, or developed a new theory, I can only recommend any person here who feels an interest in ancient history to study his recent work; promising them, from my knowledge of this eminent archæologist, that whether they be converted or not to the theory of man's higher antiquity on the American continent, at least they will learn a vast quantity of new facts, will conceive a multitude of new possibilities, and will thoroughly enjoy a very charming style, which is not to be lightly esteemed because it seems lightly written.

One word more upon the subject of American antiquities. There is a work now in the press,—I speak merely from hear-

* Histoire des Nations Civilisées de l'Amerique Central. Preface, p. lxi, sec. I 2.

† I do not know where the objections to M. Champollion's system can be found so simply stated as in vol. II, chap. X, of a work called "Egyptian Antiquities," belonging to the admirable "Library of Entertaining Knowledge," dated 1836.

say, and, as it were, to warn those members of the society who feel curious on the subject,—which, if one may believe report, is destined to confer additional fame upon an archæologist of great eminence; I mean Mr. George Squier. Having passed the years of youth and credulity, I may be held excused if marvellous stories do not any longer produce very great effect upon my mind; but there seems every reason to believe that the discoveries of Mr. Squier in Peru and the adjoining regions are of the most interesting nature. We hear,—always by report, let it be remembered,—of investigations at Tiahuanaco, the Stonehenge of America, which reveal singular facts, and give rise to theories not a little startling. It is not fitting to dwell upon this subject, but we must all look forward with vast interest to the forthcoming volumes of Mr. Squier.

Were it only for the good example of industry they set us, it were worth while, from time to time, to throw a glance upon the work of American Archæologists. Nevertheless I think we cannot justly be accused of idleness on our own side. In this rapid review which I am taking of the current events relating to our science, I find one which we must approach with very mingled feelings. Since I last addressed you from this chair, gentlemen, the reasonable pride which we of Liverpool may have felt, while examining those unique specimens of Anglo-Saxon art in our museum, has sustained a heavy blow. The "Fausset Collection" was known and famous throughout Europe; students visited our town solely to make acquaintance with its treasures. Well, gentlemen, I fear—I will not speak decisively as yet, but I fear—some part of that glory has departed from us. Not that a thief has robbed us while we slept; the brooches and the fibulæ shine as brightly as ever in their cases. They are as beautiful as ever, but I fear they are no longer unique. The "Fausset" is perhaps not now the first among Anglo-Saxon collections,

and is certainly not the only one of highest class. In the neighbourhood where our specimens were unearthed, at Faversham in Kent, recent investigations have brought to light most noteworthy treasures in the same style of art. One must wait until the various objects can be compared, side by side with one another, before definitely pronouncing the superiority of either; but I would counsel enthusiastic archæologists of Liverpool to prepare themselves for possible defeat. I may add that the excavations at Faversham are still proceeding with success.

Nor in other subjects connected with our early history is there any sign of backwardness. The noble volume of Dr. Bruce, published last year, has gathered into one view all the information we possess upon that interesting subject, the Roman Wall. Mr. Roach Smith is prosecuting his labours in the wide field of Ancient London. Another gentleman has expended vast learning and ingenuity in an attempt to prove that the Anglo-Saxon conquest was not nearly so complete as we are used to think; and the effort, though it fail to convince our reason, one must needs welcome gladly, as containing the fruits of extraordinary research, and thus of great value indirectly.

A similar acknowledgment must be paid to Mr. Piazzi Smith, who pursues with unwearied diligence his curious theory of a "Pyramidal revelation," if I may be allowed so to express his idea; and pursues it with such success, apparently, as to have secured no inconsiderable body of proselytes. These efforts are by no means wasted, because they fail in their original purpose.

In other countries have been made discoveries of great importance. If it be true that the tomb of Mausolus, king of Caria, is now identified on the promontory of Halicarnassus, modern Boudroume, we may expect wonderful results from the excavations on its site. You will remember the

story of that great work, undertaken by a mourning queen in memory of her husband. It was accounted among the seven wonders of the ancient world. In the rather confused description which Pliny gives, (*Hist. Nat.* L. xxxvi, cap. iv) he remarks, "that the circumference of the building was "altogether four hundred and forty feet; the breadth from "north to south sixty-three; the two fronts not quite so "wide." It will thus appear probable that the word "cir-"cumference" is here used to describe the colonnade which surrounded the building. The height of the pteron, as Pliny calls this outer colonnade—rather oddly, I think—was thirty-seven feet and a half. It consisted of thirty-six pillars. Above the pteron rose a pyramid, of twenty-four steps, equal in height to the lower building. On the crown of this pyramid stood a four-horse chariot by Pythis. "This "addition," says Pliny, "makes the height of the entire "building one hundred and forty feet"; which is scarcely compatible with his own figures. The eastern side of this great monument was sculptured by Scopas, the north by Bryaxis, the south by Timotheus, and the west by Leochares. It will thus be seen that very singular treasures might probably be recovered, were the search zealously undertaken.

On the whole, gentlemen, in whichever way I turn my eyes, I can find ground for nought but congratulation to ourselves. There are indeed many schemes I should like to see carried successfully into practice, for the greater facility of our pursuits and the advantage of historical truth; but so encouraging is the progress one may note almost day by day, that we should be content to wait, in confidence that all will at length perceive the uses of Archæology, and will seriously exert themselves to promote its interests. One suggestion only will I venture to put forth.

Every county in England makes its boast of a few great families, whose names and varying fortune have been more or

less intimately bound up with our national history. The boroughs which one of their members represents to-day, was chartered by his forefather; the lands which surround their dwelling were registered in detail in antique rolls; the more notable of their ancestors often rigorously set down the minutest facts of his daily life in a diary or a careful memoir. These priceless muniments still exist, or a great number of them. But where in nine hundred and ninety-nine cases are they stored? With singular care the documents are preserved which relate to the mere events of to-day, the profit of the family; but for those dim parchments and ancient volumes, which are the title-deeds of its rank in honour, the record of its worth or its unfitness for that high station which England gave, and has often snatched away, what place is devoted for them? Too often a distant and dismal chamber, where rats gnaw, rain beats in, mice and worms burrow and build. I am not speaking without book, gentlemen! and it would even be well if the culpable carelessness of owners stopped at this point; for in too many instances the muniment room is abandoned without thought to the tender mercies of children and housemaids. Every day, manuscripts of the deepest importance to the nation are torn up for nursery toys, are cut to pieces for silk-winders, are absolutely burnt in grates and garden furnaces. One feels a positive thrill of indignation in recalling some stories of this sort which rest upon authority incontrovertible. Such irreparable waste of the national property, for national it is, cannot be allowed longer to continue. I should suggest that the heads of the South Kensington Museum, or other officers of departments where there is room to spare, should issue an invitation to all persons having such documents in their possession, should by that means collect these treasures together, and there and then examine and report upon them. Some such course *must* be followed. It would be preferable that the owners should

solicit the attendance of some skilful person from the British Museum to examine their muniments,—and such requests are rarely refused, I may add,—but even if this be done, as in a very recent instance, the confusion is often found to be so utter and complete, that half a lifetime might almost be spent in restoring order, and in properly examining the deeds. I take it this is one of the foremost questions now demanding the attention of archæologists. It must be solved. One-half the controversies which occupy the time and study of leading men in our science might, I feel sure, be very speedily set at rest if all the private collections of England were thrown open; and it is a mistake to conclude, because antiquarians differ, and even make some noise in their differences, that they *love* disputes. Antiquarians like a quiet life, as do other men, but they are ardent for truth, and truth, in these matters, lies not at the bottom of a well, but in the dusty recesses of a muniment room. That she may be speedily rescued from that degrading position must be the earnest hope of every member of this Society.

NOTICE OF ROMAN-BRITISH CULINARY VESSELS, DISCOVERED IN NORTH WALES.

By Henry Ecroyd Smith.

READ 3RD DECEMBER, 1868.

REMAINS dating from the Roman occupation of this country very sparsely occur in the northern portion of the Principality. The stations situated upon or near the sea-board, have within record yielded few mementoes of the Latin conquerors, or the arts they not merely introduced, but thoroughly established, in the important, flourishing, and we may add favoured, province of Britain; consequently the objects now chronicled possess additional significance and interest. Even throughout Great Britain, as likewise in France, the *adjuncts of the kitchen*, in houses of the better class, are, with little exception very rare,* having proved far too useful to be relinquished whilst reparable in any possible manner, and only as a last resort melted down for other purposes. The exceptions are confined to coarse articles—the common *mortaria* or mortars of baked clay, in which meats, as also grain, fruit, and other vegetable produce were pounded for *made* dishes, to which the Romans were partial—and the still more cumbrous *quern*, formed of stone, or of lava from Andernach on the Rhine. *Iron fire-dogs*—not for use in the warming of apartments, as in mediæval times, but for sustaining *bars*, from which

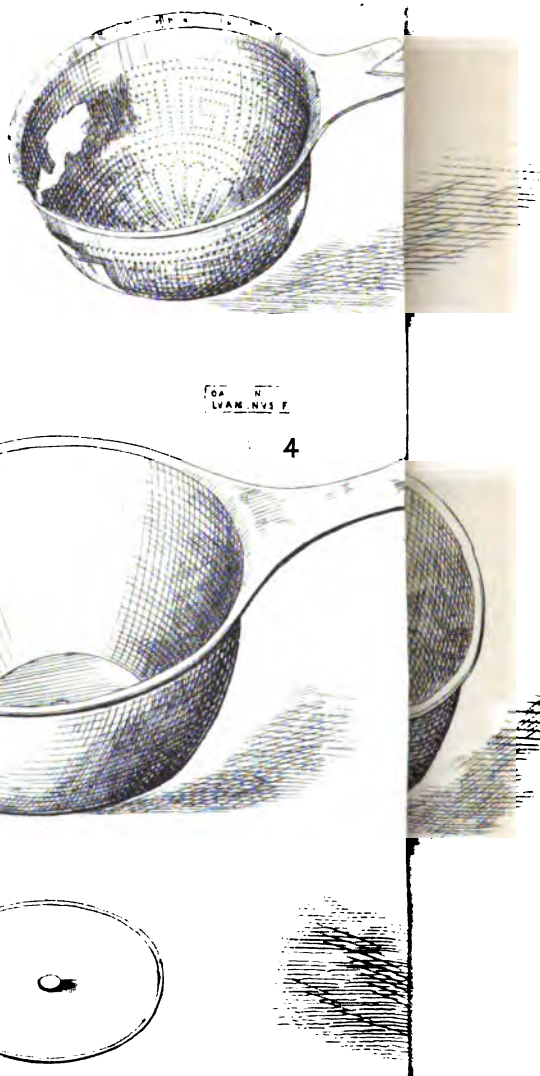
* *The Celt, the Roman, and the Saxon*, p. 336.—Montfaucon states, "We have "very few remains of the Kitchen utensils of the ancients, having no marbles to "represent more than part of them. They were, however, very numerous.—Vol. III, book iii, p. 78.

depended *caldrons* and other large vessels over fires—have been found at Mount Bures near Colchester surmounted by moulded heads of oxen, with bright knob-ended horns;* and at Shefford near Stamford Bury, Bedfordshire, in 1832, other examples bearing stag's heads, were discovered in a funeral vault, paved with Roman tiles, along with an iron *tripod* and a number of bronze objects of smaller size.† The tripods of bronze or iron, holding *pot-hooks* and *chains* to sustain *kettles* or boilers, complement the very meagre list of identified culinary utensils, hitherto recorded as occurring in Britain, save a few of minor class as *saucepans*, *ladles*, and *colanders* or strainers, which were all used in connection with the *cooking by stove*. Though our present examples belong to the last named category, they yet present some especially noteworthy features.

In or about the year 1862, whilst engaged in ploughing a somewhat elevated but yet secluded field bordering on the main feeder of the Aber, among the hills, nearly a mile and a half directly south from Abergele in Denbighshire, an old farmer named Hughes encountered a quantity of "rusty pots and pans," the bulk of which he very stupidly sold for their metal value. The only person of his household who had sufficient sense to desire the retention of a few pieces, was a servant girl, Mary Owens by name, to whom we are indebted for preserving from the melting pot or furnace, the sole representatives of what may safely be designated as the most valuable discovery of Roman culinary bronze vessels ever effected in this country.‡ So numerous were they, it is stated a wheelbarrow might have been filled with them; consequently half-a-hundred pieces is a very moderate estimate,

* *Collectanea Antiqua*, II, p. 25, and plate. † *Ibid.*, p. 29, pl. xi.

‡ They were found in sets or "nests," *i.e.* packed one within another according to shape, and the deposit, from the description of eye-witnesses, and taken in conjunction with the superior character of the pieces, evidences a burial dating from the early Roman occupation of the Principality.



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ROMAN-BRITISH CULINARY & DIE D.

of which only six examples were *scoured with brick-dust*, to remove the rust, and retained. One of even this small batch has since unfortunately disappeared; the remaining five utensils consisting of—

1. A *cup*, 1½ inches in height by 3 inches in diameter; capacity 2½ ounces.

2. A *platter*, ¼ of an inch high, and 6¼ inches diameter across the rim, 5¼ inches at the base; capacity 9 to 10 ounces.

3. A *strainer-ladle* or colander, 12 inches long, the bowl 3¾ inches diameter, 2 inches deep.

4. A *saucepan*, 2 inches high by 4½ inches wide, exclusive of the handle, which is 4 inches long; capacity 10¾ to 11 ounces.

5. A second *saucepan* of similar size, but differing in ornament; capacity 11 ounces.

With the exception of No. 3, which is owned by Mr. Jones of Abergele, these vessels are now in the possession of Mrs. E. M. Humphreys of the Cambrian Arms, Pensarn, who will have pleasure in shewing them to interested visitors. The above enumeration is simply for convenient reference, and we now proceed to a more particular description.

The Cup is of an elegant and classical bowl-like form, with small projecting rim moulded within. It has been cast in bronze, and the solid base displays below, a raised button with a still higher central knob; its upper (inner) surface being convex, with a decided apex. This little *scyphus*, which much resembles many examples in fine old oriental porcelain, both in shape and in the absence of any handle, has been plated with tin over the whole inner surface, so artistically that one of our first local silversmiths asseverated the vessel could not possibly be antique, being plated in *the best modern workmanship;* whilst the finish is so fine and bright as strongly to suggest the use of silver for burnishing. Of a truth, there is little really new under the sun! No

similar little drinking vessel would appear to have been described or in other way recorded as occurring in this country.

The Platter, Waiter, or Salver, for any of these designations would be applicable, is apparently a specimen of the Roman *scutella* or *patera*, of which latter class there certainly was a flat variety, as distinguished from the more frequent shallow-bowl or saucer shape, of which a nice example was exhumed at the Roman station of Chesterford, in Essex, being illustrated and described by the Right Hon. R. C. Neville (subsequently Lord Braybrooke).* It bears the device of a serpent, upon the horizontal handle, which is looped at the extremity for suspension when not in use, and possessed a circular projection below the centre of the bowl, as a "rest." This vessel has been gilt, and is presumed to have been intended for sacrificial purposes. Waiters or stands have certainly been found at Herculaneum. Pennant remarks upon a confusion of the terms *patera* and *apophoreta*, the latter being *round, flat*, and without a cavity,† thus completely describing the Abergele utensil. Our platter is circular, and in general character resembles the cup, but its rim possesses three narrow line mouldings in place of the single broader one of the smaller vessel. Here, the broad and flat bottom constitutes the base, concave inside, with the bare central apex, visible through the plating; the outside being sufficiently concave to enable its central button to be level with the outer rim, where a band of slight lathe-grooves appears in the *tin-plating* which completely envelopes the platter, inside and out, and looks, with little exception, fresh as from the hands of the artizan.

The Colander or Strainer is formed of bronze, and remains

* *Sepulchra Exposita*, p. 74, and plate.

† *Whiteford*, p. 88; *Fosbrooke's Encyclopedia*, I, 343.

nearly perfect, though thin and unplated. It belongs rather to the class termed *Trulla* than *Cola*, the latter being of greater size, and chiefly used for cooling wine, which was poured over ice (held in the *colum*) into a large bowl beneath. The smaller variety, like our example, combined the uses of both ladle* and strainer, more especially when the bowl was deep, as also in a specimen found containing Roman coins at Chesterford, in December, 1847,† the perforation being executed in pattern, but by no means so elegantly as in this, which bears a floral radiation of pierced work in the centre or base, surmounted by a broad border in a variety of the beautiful Greek fret, which, deservedly popular in decoration anciently as now, was frequently reproduced on vases by painting, as also in Mosaic work, stucco, and masonry. It is said that at least half-a-dozen other bronze Colanders were found with this, probably differing in pattern, but one example at Pompeii *fitted into its bronze pan*, is engraved by Archdeacon Trollope, apparently of identical design; in this case, however, the bowl is of larger size, and is probably a *cola*. Another Romano-British example, similar to the Chesterford one in size, metal, and design, was found at Whitfield, Northumberland, together with three kettles or boilers, all of which are now in the Museum of Antiquities, Newcastle-upon-Tyne. A second, Mr. Roach Smith informs me, occurred in Lothbury, London, some years ago, but was lost ere the fact was reported to him; a fourth, with fragments of two others, are enumerated by the Hon. Charles Townley among the fine bronze Roman antiquities discovered at Ribchester, in the last century, and to which further reference will be made.‡ Dr. Kendrick of Warrington adds, that a

* A *Silver Ladle* is recorded to have been found, with Roman coins, within the walls of Richmond Castle in Yorkshire.—*Gough's Camden*, II, p. 91.

† *Sepulchra Exposita*, p. 95, and plate.

‡ *Vetusta Monumenta*, vol. iv.

Colander of this class, described but not figured in *Baines' Lancashire*, and found in Risley Moss in this county, is now in the possession of John Ireland Blackburne, Esq., of Hale Hall.*

The Sauce or Stew Pan—forms like this bearing the name of *skillets* in many parts of the country—No. 4 of our list (and plate) belongs to a class of vessels, *patellæ*, in constant use in all houses of the better class. It consists of a deep bowl-shaped receptacle, recurved at the rim and furnished with a horizontal and flat handle, broadening outwards—the extremity being semicircular—enclosing centrally a pierced or perforated trefoil, the lower lobe of which is somewhat narrower and more elongated than the others, and from its point an incised line or groove, half an inch long, tapers off. This peculiar orifice is the more carefully described through an impression it has induced in many minds that it implied the *sacrificial* character of the vessel, an idea more specious than sound. Its form is certainly not calculated for suspension by any hook except a wire one, but as this class of vessels would seem to have been regularly kept in sets and fitting inside one another, even so small an opening would prove amply sufficient for suspending all together by a wire-ring or cord. The sacred character of the trefoil is well known, but the healing virtues of the pansy (the real form of the perforation) were greatly valued in early times. A late writer remarks, "It is well known with what affectionate regard that simple "flower, the pansy, is held by cottagers and others throughout "the country; they do not know why, but there is a feeling "in regard to it that cannot be attributed to the beauty of "the flower, and it has no perfume. The pansy (*viola tricolor*) "was an emblem of the Trinity, and was prescribed for, and "*considered good in, almost all complaints.* The name is

* Montfaucon figures a fine specimen, perforated in a very elaborated pattern. Vol. III, Book iii, plate 20.

"derived from and is the same as the Welsh word 'penser,' "*to think* of God in the hour of sickness must do good, for "viewing His mercy aright must produce *heartsease*, another "and the common name for this plant."* Consequently the symbol of the revered plant might be expected to exercise a wholesome influence upon everything cooked in this receptacle, a very unnecessary precaution in regard to sacrificial libations. On the right of the upper surface of this handle, obscured by rust and much corroded, I detected the subjoined letters, which no doubt formed part of the inscription of the maker's name, the latter line evidently being *Luaminus F(ecit)*—

"CA V
LVAM . NVS . F."

These letters are *incised*, but the names upon metal vessels are usually stamped. The bowl is quite plain, with the exception of the base which is slightly concave, and has an outer line moulding and a central button, but the rim of the latter is not sufficiently produced to the level of the former to constitute part of the "rest." The inner surface was originally tinned over, but the plating has mostly been eroded.

The Skillet, No. 5, is of the same general form as the last described, and though of similar capacity it fits into No. 4 up to the rim; it differs, however, in the handle and base mouldings. The handle bears curved line mouldings along the margins of the contracted portion, and concentric ones at the semicircular extremity, the centre of the inner one being perforated for easy suspension of the vessel when not in use. The base has an outer rim, two concentric and concave

* *Evidences of the Antiquity and Universality of a Belief in the Doctrine of the Holy Trinity.*—By a Layman, London, Hall & Co., 1863. It is somewhat remarkable that the only example engraved by Montfaucon possesses a similarly perforated handle.

mouldings, with a central button. This button and the small outer rim of the inner band, form part of the "rest," having a common level. Inside, the bottom is convex, its centre also possessing concentric mouldings, and the intermediate hollows still display traces of the original tin-plating which, as in the former case, frequent scouring in process of time has all but completely removed.

These two vessels—which have been used for cooking upon the stove small stews, soups and sauces, (which were poured from them into the simpulæ or ladles proper, for conveyance to the table by attendants)—are, like the platter of bronze, cast in very substantial metal and finished in a superior manner upon the lathe; with the exception of a small hole in No. 5, they are in excellent condition, and if *re*-tinned, would prove almost as serviceable as ever. They are most worn, as might be expected, on the *near side*, as held properly in the right hand for use.

The few examples of similar vessels in this country have mostly been found in pairs.* Two—one *found* lying within the other, among a large number of bronze objects and the iron *fire-dogs* above mentioned—are deeper in the bowl than our Welsh saucepans; a still larger vessel of bronze was found near. In the *Catalogue* of Antiquities forming the temporary museum in connection with the meeting of the Archæological Institute at York, in July, 1846,† a couple are thus described, "Two *patellæ* or skillets, *the inner side* "*tinned*, supposed to have been culinary vessels; one fits "into the other, but not closely; they have flat handles, "perforated at the extremity for suspension. The bottom is

* The Mayer Collection only contains one bronze stewpan, which is probably a Continental specimen; its base is moulded similarly to those mentioned in the text, but the sides are so thin and oxidised it is difficult to recognise any trace of plating.

† *Memoirs illustrative of the History and Antiquities of the County and City of York*, 1848, p. 10.

"of considerable thickness, and ornamented with deeply cut "concentric hollows and raised mouldings, formed by the "lathe. A hole on the side of one of them has been mended "with lead or some soft white metal. Dimensions—diameter "of bowl (larger specimen) 5½ inches, (smaller) 4½ inches; "length, including handle, 10¼ inches and 8½ inches, depth "of both about 2½ inches. On the handle of the smaller "patella is an impressed pattern, composed of a *thyrsus*, "vine-leaves and tendrils. Found in 1841 on a farm called "Round Hill, in one of the upper gills or valleys of the "parish of Masham, North Riding, called Arna Gill. They "lay in a small pit, covered by a large flat stone, and nothing "was found in them. From the Swinton Park Museum."

Unfortunately these have since been purloined; the smaller of the two must have closely resembled our No. 4. A pair of very similar pans are stated to have been found near Dumfries, and to be figured in the *Archæologia*;* likewise an example in *silver*, with a vase, and four handles of similar vessels were found, in 1747, near Capheaton, Northumberland, adjacent to a Roman road,† which are now preserved in the National Collection, as are two others found at Ribchester, with some remarkable objects in bronze, to be noticed shortly. On the river Witham, near Lincoln, a small pan was dredged up along with a number of antique weapons in bronze and iron, which is apparently identical in shape, as it was in size, with our No. 4. It is thus described, "From its form and "the grain of its fracture and its being one entire piece, it "appears to have been made of cast metal. It is considered "to be a piece of Roman workmanship. It is neatly and "curiously grooved at the bottom, to admit the fire to pene-"trate to the contents more easily. On the handle is im-"pressed, seemingly with a stamp, 'C. ARAT,' which letters

* Vol. xxxiii, pl. 25, p. 436. † Vol. xv, pl. 23.

"may possibly signify—*Caius Aratus*, as the latter part "of the stamp seems not to have made an impression. It "appeared to have been *tinned*, but almost all the coating "had been worn off. *As it was said that it had been used "by some boatmen for some time after it had been found, it "might have been tinned after it got into their possession.* "The art of tinning copper, however, was understood and "practised by the Romans,* though it is commonly supposed "to be a modern invention, so that it is not very improbable "that this utensil was originally covered with tin by that "people."

A fine bronze vessel somewhat analogous in contour, and engraved in the *Archæologia*,† might seem at first sight to belong to our category, but it has evidently been constructed for sacrificial purposes. Its handle is most elaborately ornamented with dolphins, in high relief, and with vine and ivy wreaths, executed in nigellum and pure copper, besides other decorations, and the name of the artificer, "BODUOGENUS F," upon the handle. This beautiful vessel was found at Prickwillow, in the Isle of Ely, in April, 1838, and belongs to the Bateman Collection. From the peculiar ornamentation it would seem to pertain to the class termed *patera hederata*.

The above-mentioned vessels are all we have been able to find recorded, in any way resembling the present ones, and the metallurgy of these is the next point to be considered. Here, we are fortunate in possessing a record of carefully elaborated experiments on the *metal* of certain antique objects, which, so far as can be judged, was perfectly analogous in character to that of the bronze vessels before you. These experiments were evidently made *con amore;*

* "Stannum illitum æneis vasis, saporem gratiorem facit et compescit æruginis "virus."—*Pliny*, Lib. 34, cap. 17.—This may be freely rendered, "Plated Tin "upon Bronze Vases makes the flavour more agreeable, and neutralizes the "bitterness of the rust."

† Vol. xxviii, p. 436.—See also *Bateman's Catalogue*, p. 132.

no trouble has been spared, and they were not confined to a chemical analysis of the ancient metals themselves, but extended to synthetical manipulations of alloys, to produce similarity; or, varied for testing comparative utility and durability, in connection with the several purposes to which the various utensils had been applied.

In the years 1787-8, the river Witham, between Kirksted and Lincoln, and contiguous to the Roman Foss-road (*Via Fossata*), became the scene of numerous discoveries of antiquities in metal. Near the site of Bardney Abbey a large quantity of armour was dredged out, including a fine sword, inscribed "BENVENUTUS + ME + FECIT." In another portion of the stream bronze objects, usually held to be of pre-Roman character, were obtained, along with others of undeniable Roman origin. Many of these were added to the collection of Sir Joseph Banks (incorporated in the British Museum), who communicated them to the Philosophical Society,—one member, at least, being so interested in their composition as to spend no inconsiderable time upon experiments connected with the investigation. The result is a disquisition, printed in the *Transactions* of the Society,* entituled "Observations on some Ancient Metallic Arms and "Utensils, with experiments to determine their Composition," by George Pearson, M.D., F.R.S. The analysis appears to have been conducted with the greatest care and in a thoroughly scientific manner, hardly to be excelled at the present time. It is impossible to enter upon all the details which are described *in extenso*, but the facts and conclusions educed and the more important observations thereupon are here reproduced, as the best exposition of this portion of our subject. The objects, which are all of bronze, comprise—

1. A Roman Military *Lituus* (a musical wind instrument,

* Orig. Ed. 1796, Tab. xii-xv, p. 450; Abridged Ed. Vol. xviii, 1796-1800, pl. I, p. 38, *et seq.*

and the only example known to have been found in this country*), of hammered metal $\frac{1}{10}$-inch thick, soldered at the joints with tin, it being readily melted by the application of a red hot iron.

2. A *Spear-head*, of large size, cast hollow to receive a wooden shaft.

3. A *Saucepan* (Fig. 3). This we have already described at length.

4. A *Scabbard*—with a sword of iron rusted within—supposed to be either Danish or Saxon, being found with other armour near the site of Bardney Abbey, destroyed by the Danes in the year 870.† The scabbard is of hammered metal, $\frac{1}{10}$-inch thick, is well designed, and of good workmanship.

The above were all found in the River Witham.

5. A *Celt*, found on the peninsula of Ballrichen, near a Druidical grove; it weighs 1$\frac{1}{4}$lbs.

6. A second *Celt*, found in Cumberland, weight $\frac{3}{4}$lb.

7. A third *Celt*, of smaller size, weight 5 ounces.

The analysis shewed these objects to consist of *metals only*, these being *copper* and *tin*, principally the former; the latter being apparent from a white deposit (in the *saucepan* amounting to 21$\frac{1}{2}$ per cent.) afforded upon dissolution in nitric acid; as also by synthetical experiment. The actual proportion of tin proved to be, in the Lituus and Celts, Nos. 6 and 7, a little more than 12 per cent., or 1 to 7$\frac{1}{2}$ parts of copper; the Spear-head, 14 per cent.; the Saucepan, a little above 14 per cent.; the Scabbard, a trifle above 10 per cent.; and the largest Celt a little over 9 per cent. All proved to be "malleable and uniform in their texture, which properties

* So rare is this class of objects, that Mr. Roach Smith alludes to a trumpet (*tuba*) he met with in a continental museum, as probably the only example on this side the Alps!

† *Tanner's Not. Monast.*, p. 248.

" metals do not possess when they are mixed by fusion with " extraneous substances hitherto discovered by analysis, " except *carbon* in several metals, and siderite in iron only."

The principal uses of alloy of copper by tin, are—to render copper less oxydable by water or atmospheric air; to give hardness; to render it sonorous and more fusible; to produce a closer texture, and whiteness for reflecting light; and to render it less tough and clingy, or "claggy" as moulders term it. " It is worthy of remark, that these alloys of copper " with tin, are evidently different in their colour and grain " from such alloys with the addition of even $\frac{1}{100}$ of their " weight of *zinc*, and also from copper alloyed by $\frac{1}{100}$ of *its* " weight of zinc.

" The *grain*, also of the fractures of the spear-head and " *saucepan* before melting, is much coarser than that of the " ancient metals which contain a smaller proportion of tin, " but it appears from the synthetic experiments that the grain " becomes finer as the proportion of tin is increased.

" Copper, alloyed with a larger proportion of tin than is " generally contained in *celt-metal*, *i.e.*, with $\frac{1}{9}$ or $\frac{1}{8}$ of its " weight of tin, is fitter for cutting instruments, and piercing, " boring, and drilling tools, than celt-metal, because it is " harder, takes a finer edge, and yet is sufficiently strong on " most occasions; nor do we possess at this day any metal " that I know, which is so fit for knives, swords, daggers, " spears, drills, &c., as this alloy, *except iron and steel.* The " spear-head contains tin in the very proportion here men- " tioned, and if the metals had been pure, it would perhaps " not have been possible to have made this instrument of any " other metals, which were so proper, and at so small an " expense. The *saucepan*, also was made of alloy of copper " by tin in the proportions last mentioned, but as this " instrument is sufficiently hard with less, or without any, " tin, there seems to be no use from the addition of it. We

" may conjecture, indeed, that as the *saucepan* was made of " cast metal, the tin was used for the purpose of rendering " the copper more fusible, and thus also for more easily " *casting* forms of it. Perhaps also the tin was added to " render the copper less readily oxydable, and for the colour " of this composition.

" There is not the least reason to suppose that the ancients " added *iron* or *steel* to increase the hardness or strength of " the alloy of copper by tin; nor does it appear from the " experiments with this mixture that any advantage is to be " expected from this addition, at least not for cutting instru- " ments.

" Mr. Dizè made several different experiments on eight " different sorts of coin, Greek, Roman, and Gallic. It " appears from these experiments that those contained from " $\frac{1}{4}$ of a grain, to $24\frac{1}{2}$ grains of *tin* in 100 grains of each of " the old metals, and it appears that these coins contained no " other metal but copper and tin.

" From the preceding experiments and observations we " learn that tin was infinitely more valuable to the ancients " than it is to the moderns; without this metal it is not easy " to conceive how they could have carried on the practice, " and invented the greater part, of the useful arts. Tin was " even of more importance to the ancients than steel or iron " to the moderns, because alloys of copper by tin, would " afford better substitutes for steel and iron than any which " the ancients in all probability could procure. We see also " the importance of Britain in times more remote, probably, " than those of which we have any record or tradition, being " probably the only country that furnished the metal so " necessary to the progress of civilization. In the barbarous " state of its inhabitants this island was known to the " civilized nations of Europe, Asia, and Africa, and de- " nominated in two of the most ancient languages, viz., the

"Phœnician and the Greek, by terms which denote *the land "of tin*; for such, according to Bochart, is the import of "*Britain*, a corruption of *Barat-Anac* or *Bratanac*; and "there is no doubt of the meaning of the Greek word "*Cassiterides*."*

Tin-plating, such as appears upon most of our Abergele vessels, claims more attention than would seem ever to have been paid to it. The coating of sacrificial implements and personal ornaments with the precious metals has repeatedly been commented upon, but mostly in reference to minor objects of the latter class, as fibulæ, a specimen of which was found on the sea-beach of Cheshire in the course of last year. Among the culinary vessels we have enumerated, a few are distinctly stated to be lined with tin, and others have been suspected to retain a trace of the application, yet no English antiquary has called attention to this interesting art. We have seen that it was practised by the Romans,† and numerous examples might reasonably be expected to abound, but such is not the case; and even at Pompeii and Herculaneum, Mr. Trollope‡ does not appear to have remarked such plating in the numerous culinary and other vessels he so carefully illustrates and describes; whilst Fosbroke, evidently quoting some other writer (probably from the Sister isle) says,

* *Britannia*.—"Notwithstanding the research of Camden and those who pre-"ceded him, it may be doubted whether the origin and significance of this name "have been ascertained. I am not aware that any more recent attempts have been "made; so, perhaps, a charge of presumption will not lie, if for *Brit*, speckled, "parti-coloured, and *tania* region or country, it is suggested that the correct "derivation is *Brith*, bringing forth; *stain* or *stan*, tin; and *ia*, country or island; "the combination Britannia, signifying the tin-producing country or island, it "being observed that an aspirate before the letter *s* renders it quiescent, and is "apt itself to be lost. Another similar root is *Bruth*, pure, unalloyed; and this, "considering the noted purity of the metal found in these islands, would be a "very natural variation. . . . . In the words *Insulæ Britanniæ*, we have a "synonym for the Greek *Kassiterides*."—'A Dicky Sam,' in *The Athenæum*, 21st November, 1868.

† Fosbroke asserts that *coating iron with tin*, for making utensils, is ancient, but gives no authority or examples.

‡ *Illustrations of the Remains of Roman Art*, by the Ven. Archdeacon Trollope, M.A.

" Dripping-pans are found at Herculaneum, *tinned with fine* " *silver!*" Coming down to the great Roman *municipia* of Britain, we search in vain among the records of discoveries at Isurium, Eboracum, and Londinium, the successive capitals of the province, for any description of such manipulation, whilst the antiquaries or historians of Lindum, Ratæ, Deva, Uriconium, Corinium, Aqua Solis, Portus Lemanis, Ragulbium, and other important Roman towns and *Castra*, apparently have no examples to shew. With the exception of Rigodunum* (Ribchester), it seems to have been reserved for isolated localities on different sides of the island to produce good specimens of a very important art in connection with bronze receptacles. The valuable objects of Roman art in bronze, discovered at Ribchester, are, happily, described by the then owner, the Hon. Charles Townley, F.R.S., in a communication to the Society of Antiquaries of London, which was subsequently printed in the *Vetusta Monumenta*, with superior illustrations.† They were found near the bank of the Ribble, preserved in red sand, and comprise a fine *processional helmet*, with mask of Minerva, and covered with embossed figures in action; a *patera*, with fragments of two others; portions of a *vase* with silvery-looking polish inside, and doubtlessly tinned; a *bust* of Minerva; four circular *plates* from a military standard, with remains of two *quadruple buckles*; a *colander*, pierced in elaborate design, with portions of two others; part of a *candelabrum*, a circular *bason*, and four *round plates* resembling antique mirrors in form, but not possessing half their thickness of metal.

By a careful analysis, kindly undertaken by Mr. Alexander Norman Tate, the metal used for lining these saucepans and cup, and completely coating over the platter, is veritable *tin*,

* This name is strongly and most reasonably suspected to have been *Ribodunum*.

† Vol. V, pl. i to iv.

and little else. A slight residuum was evolved, evidencing the presence of a minute quantity of some softer substance, probably lead, and this metal or an alloy of it with tin (pewter), no doubt was employed in soldering the plate around the side, to that upon the base in each vessel, which appears to have been first separately affixed to the bronze. The whole has been admirably finished, like the cast bronze itself, upon the *lathe*, as the circular indentations abundantly exemplify.

A difference of opinion will no doubt exist among antiquaries, as to whether the fabrication of these tinned patellæ, apparently the "*incoctilea*" of the Romans, is to be attributed to Italy, Gaul, or Britain. Well, and in fact artistically, manipulated as they are, there seems good reason to conclude these to be Roman-British, or the produce of British artificers under Roman superintendence (possibly copies of continental examples), and the liberal use of the metal tin,—rare and invaluable on the continent,—confirms this view. The Latin and Greek artizans commonly impressed their names, as we have seen, upon the better class of wares; and the Bateman sacrificial patella, as also very possibly the sword from the Witham—though this latter object is evidently of some centuries later date—may have been manufactured abroad. Montfaucon illustrates an example (one of the three named) found in France; it is similar to our No. 4, but below the pierced trefoil at the end of its handle appears the maker's name, "NARGISS."* The Gaulish, or rather perhaps Romano-Celtic character of this and other manufacturers' names quoted is worthy of note, and it is interesting to compare them with those of potters, during the Roman period, found upon fictilia in France. Mr. Roach Smith, who opines that all the bronze vessels above recorded are the products of Britain and Gaul, gives in his list of Gaulish

* Vol. III, Book iii.

potter's marks,* "SACRILLOS CARATI," on a mould of white clay, ("*C. Aretti*" or "*Caretti*" occurs in London); "BODUOC F." appears on a vessel from the valley of the Allier, and "BURDONIS" has been met with in London. Boduognatus was the name of a chief of the Nervii, whom Cæsar subjugated;† and "BODENI" (probably part of *Bodenius*) occurs in Mosaic-work, in a fragmentary inscription formed of unusually large letters, in a fine pavement of the Roman villa at Thruxton, Hants. The affinities of these two series of names, the one on metal the other on terra cotta, will be apparent to all. It was through such carefully educed ethnological affinities, that enabled Mr. Smith to determine the respective Roman provinces in which certain classes of fictilia were produced long anterior to the discovery of the local kilns, which remarkably confirmed his attributions and set the vexed question to a great extent at rest.

The manipulation of bronze and brass was necessarily a costly and troublesome process at this period, yet it must have been introduced at a still earlier one into our country, though whether by Phœnicians, Carthaginians, or some Romanised-Gallic tribe, constitutes matter of current dispute.

This paper has already far exceeded its intended limits, but it may be desirable to complement it by a short reference to the chief Roman remains hitherto known to have been found in the lower reach of the beautiful vale of Clwyd, upon the western side of which these interesting vessels were encountered.

Abergele lies about four miles from the nearest bend of the Clwyd, which, eight miles directly above, is joined by the little stream *Whiler*‡ from the east, at Pontruffydd, shortly after the latter has passed the finely situated village of

* *Coll. Antiqua*, vol. vi, pp. 69–71. † *Comment. de Bell. Gallico*, II, p. 23.

‡ *Wheeler* of the Ordnance Maps, the concoctors of which having been misled, as in hundreds of other instances, by the pronunciation.

Bodfari, which, in *Benton's Itinerary of Antoninus*, and copied in *Lewis's Topographical Dictionary*, is said to take its name from the Roman *Varis*, through signifying "*the "mansion of Varus.*" *Bod*, undoubtedly signifies a settlement (or equivalent to our English *abode*), but as no mention is made in history or tradition of any general or other public officer in Britain, named Varus, the probability lies in favour of a derivation from the adjacent *ford* of the Clwyd, inasmuch as Dr. Gale intimates, apparently from Pliny and Camden's remarks, that *varia* and *varus* (as in *Dunovaria, Isannavaria, &c.*) are Latinised forms of a *native word* signifying a ford or shallow, probably bar, *far*,* or *var*; instance the appellation of a pass through the Clwydian mountains, south of Moel Fammau, and about three miles west of Ruthin, *Bwlch pen baras*. Fragments of weapons, ornaments, urns, and other Roman objects, are said by Lewis to have been found in the groves of Pontruffydd Hall, in addition to coins at the point of junction of the Whiler and Clwyd, the supposed site of the ancient station upon or adjacent to a north-eastern branch of the Watling Street, which passed from Chester (Deva) to Caerhun (Conovium), situate upon the left bank of the Conway. The actual line of its route is undetermined, but, until recently, the local antiquaries have held it to lie almost directly west from *Varis* (three miles north-west of Denbigh), across the whole shire to the Conway. Recent discoveries, however, have served considerably to modify this view and to mark out, at least in the first instance, a north-western course.

Pursuing this presumed route, four miles from Varis, brings us to the southern side of St. Asaph (Llan Elwy) which, though commonly understood to derive both origin and name from a Church here erected in the 6th century, is not improbably of much earlier date. The township in

* *Ffar*, that extends out or over.—*Pugh's Dictionary.*

which it is situate is called *Bryn Polyn*, a name traditionally believed to have been derived from the Roman general Suetonius Paulinus. Three additional miles in advance, Kinmel Park is reached, a fine domain of the Dinorben family, and now the residence of H. R. Hughes, Esq., a nephew of the late lord. The old manor-house was once the residence of the Cromwellian General Carter, who it is said here concealed the Protector; and until very lately an extremely large spur hung in the church of the village of St. George, a mile further, which tradition asserts to have been worn by the redoubtable Oliver.

To the westward of St. George, a range of hills projects into the vale, the most prominent rocky elevation being Parc-y-Meirch (*vulgo* Peny-Park Hill), or "the field of the "horses," which overlooks the ancient manor-house of Dinorben, and indeed commands a fine prospect both up and down the vale. This was the site of a Roman encampment, in succession no doubt to an ancient British one, and appears to have been the centre of a host of battle grounds. Numerous local names still attest the murderous conflicts which occurred here in the 12th and 13th century, as *Pwll Angen*, "the pit "or hollow of death," now the Rectory; and *Duill-y-Bwa*, "the quillet of the bow," quillet being nearly equivalent to the English paddock. On Parc-y-Meirch the doubly entrenched camp was partially examined, during the past year, by W. Wynne Ffoulkes, Esq., of Chester, who reports the discovery of foundations of buildings; several descriptions of pottery, red, brown, and black, the last including some ornamental kinds of the so-called Upchurch ware; nails, a bronze coin, and quantities of animal bones, with numerous pebbles evidently brought from the sea-beach. This spot wants a thorough overhauling, and most interesting results may be anticipated from a careful manipulation of its rich and deep soil accumulating here from vegetable growth and calcareous

disintegration for many centuries. Immediately beneath the northern escarpment of the hill is a narrow belt of pasture land, which bears the name *Parc-y-Milwyr*, or "field of the "soldiers," where, last Spring, a large mass of human bones were discovered—no doubt removed from some battle-field in the contiguous gorge, not improbably during the gallant struggle of Owen Gwynedd for his country's independence, with Henry II. At the same time, upon the uprooting of a large ash tree, a remarkable assortment of objects, chiefly in iron, and connected with horse-gear, were exposed, and have been carefully preserved by Mr. Hughes. They include a curious quadruple buckle in bronze, with rings and chains, most of which were exhibited shortly after discovery at a meeting of the Society of Antiquaries. Westward, upon the elevated ground, and bordering upon a Roman vicinal road, many antiquities in bronze and iron have at times been met with, between Parc-y-Meirch and a point nearly opposite Abergele, as spear-heads, daggers, lance and arrow-heads, with a kind of battle-axe. These objects, now preserved by Lady Dinorben at her residence in Anglesea, are said to be mostly engraved in the *Archæologia*. Near Abergele, and over against the site of the deposition of the valuable nest of culinary utensils which have formed the subject of these pages, stands a ruined tower called the Old Windmill, but in all probability it is the relic of a watch tower, for which its elevated position is admirably adapted.

We thus find a presumed Roman station at the distance certainly of about ten miles, but connected with the site of these vessels by a military road. The immediate cause of the secretion of so extraordinarily large a number of culinary vessels at this spot, may have been a simple necessity of war, and considering also their excellent quality and superior workmanship, it seems highly probable that they formed part of the sutlery equipage of the commander in some expedition

from Deva or Conovium, who was temporarily forced to effect a hasty retreat along the vale from overwhelming numbers of half savage Kelts. The field is known as *Caemurddyn, i.e.*, "the field of the old foundations," such having been long known there, but their origin is very problematical.

From the account given by Tacitus it appears that his father-in-law, Julius Agricola, upon being nominated by the emperor Vespasian to the governorship of Britain, A.D. 78, inaugurated his command this same year by an attack upon the Ordovices, who were severely punished for their revolt. It is asserted that the Vale of Clwyd constituted the opening scene in this successful campaign, Anglesea likewise shortly falling under the general yoke of Rome.

Since these notices were submitted to the Society I have been kindly presented by the writer, Edmund Oldfield, Esq., M.A., F.S.A., and Secretary to the Arundel Society, with a copy of his article, contributed to the current half-yearly volume of the *Archæologia*, upon some Roman bronze vessels discovered upon the Castle Howard estate, Yorkshire, in June, 1856, of which I had been previously unaware. They comprise a "*nest*," five in number, of similar receptacles to the skillets of the Abergele find, from which they only appear to differ, exteriorily in the trifling ornamentation, and interiorly by greater proportionate depth. The *regulation* of their sizes has suggested to Mr. Oldfield the idea of *measures of capacity*, which, so far as the intention of the makers to render each capable of certain contents, may readily be acquiesced in, but when further conclusions are arrived at, that not only were they standard measures but that their only other purpose was *sacrificial* and not culinary, I cannot but hold these as *non proven*. The subject is ably treated, yet with all due respect to the learning, research, and general experience of the writer, I consider some inductions to be thoroughly incon-

sequent and untenable. In elucidation of this conviction the subjoined remarks are laid before the antiquarian public.

Before proceeding to the *design* of the utensils, their *scarcity* or otherwise invites a passing remark, inasmuch as we are informed such "have frequently been found on Roman sites, "and are to be seen in several museums," a statement which, as we have seen, is contradicted by Montfaucon, who only engraves one example in his very comprehensive antiquarian repertory as found in the large and important province of Gaul. Turning to Britain, a very careful enquiry has failed to elicit the fact of discovery of even a *dozen* identified specimens, hitherto recorded, viz. :—Prickwillow 1, Durham 2, Colchester 1, Mount Bares 2, Masham 2, Ribchester 2, River Witham 1. Of these, several were merely represented by fragments; and as a "set off" to the reported *handles*, which may or may not have belonged to vessels of this form, the Prickwillow specimen is enumerated, though I deny its claim to be thus classified. Of the above, Mr. Oldfield only mentions *four*. As to museums of antiquities, their contents must be regarded with caution, and no doubt some held to be Romano-British may have come from Italy, rare as the latter are. Mr. Oldfield, in a postscript, mentions others he saw in the Paris Exhibition, 1867, found in ancient Gaul; but "one swallow does not make a summer," neither do all our discoveries of "skillets," the Castle Howard and Abergele ones inclusive, render these utensils of *frequent* occurrence.*

The antiquarian reader of this *brochure* cannot fail to note with surprise, the sacrificial character or purpose claimed for all the vessels of the skillet or saucepan form, *without distinction of metal or the elaborated ornamentation* of some examples. It is in this utter ignoring of discrimination that,

* Since this paper has been in press, I have been informed by Mr. Ffoulkes of a recent and unrecorded discovery of similar vessels in South Wales.

as I take it, the chief source of error lies. In the instance of the Prickwillow vessel it is by inference assumed that antiquaries have classed it along with such plain simple ones as those from Abergele; but how stands the fact? In the enumeration of objects forming the temporary museum of the Institute meeting at York, in 1846, we find it mentioned with culinary vessels of bronze, but this was the result of *shape*, not use. In the Catalogue of the museum of its late owner, Thomas Bateman, F.S.A., published in 1855, its understood character is unmistakably attested: "114 p. *Sacrificial vessel* "of bronze, with an elaborately ornamented handle," &c. Thus, for fifteen or twenty years at least, this receptacle has been acknowledged as sacerdotal, and yet Mr. Oldfield can remark, "the introduction of enamel into the handle of the "vessel found at Prickwillow is surely inconsistent with *its* "*use as a saucepan*" *!!!*

Antiquaries have been accustomed to consider, in common with Mr. Wright, that though we have "examples of tripods "used by the Romans to support culinary vessels over the "fire," yet "a great portion of their cooking appears to have "been performed *on stoves*, and the *few* supposed culinary "vessels that have been found in this country partake rather "of the character of saucepans and fryingpans than of "kettles."* Mr. Oldfield, on the contrary, deliberately assures us that these small vessels, if culinary, were "placed "upon a *heap of fuel*," and proceeds to state "that their "under sides shew no signs of the action of fire." This is begging the question in a most extraordinary fashion, and unless it can be shewn that cooking by stove was *un*practised, the argument is perfectly futile, inasmuch as, brought into contact with blazing fuel, these utensils would be simply *abused*. The *mouldings*, which are said to endanger the stability of the skillets, if placed upon the fire, were ingeni-

* *The Celt, the Roman, and the Saxon*, p. 336.

ously suited for the stove, their thinner intermediate portions of the surface, as Dr. Pearson has remarked, enabling the heat to act more quickly upon the contents than could possibly be the case with a base of uniform thickness.

Mr. Oldfield appears never to have had his attention directed to another important point—the relative condition of the sides of these and other vessels, which it may fairly be assumed were mostly used by *right-handed* servitors, as in the present day. In the cases of the Abergele skillets and cup—as probably would be found with all other examples—the side *poured from* is not only much thinner through increased use and scouring, but in one of the pans the metal is worn through on this particular side, whilst the rest of the vessel is strong and sound. The question may be referred to any impartial person—was such wear the result of the occasional service of the altar, or of the constant requirements of the kitchen?

The discovery of a clearly *incised* maker's name upon the handle of the Abergele skillet, No. 4, effectually disposes of another assertion of Mr. Oldfield's, "the inscriptions, which "occur on bronze vessels, are *all marked with a stamp*, and "record the maker's name."

I have purposely reserved the question of *measure and capacity* for final remark, as it is, unfortunately, almost the only novel conclusion of Mr. Oldfield's in which I can agree to any extent. He confesses that, out of his nest of five vessels—unquestionably a *set*—he has been unable to find a common multiple, or exact correspondents in these ordinary Roman measures, for more than *three*. One of the others contains 22 ounces, or just double the capacity of the Abergele examples, a fact which, though attesting design in the makers of all, would seem to point to quite a distinct basis from the sub-multiple of 5 *cyathi* (8 ounces), which answered with the former, holding respectively 16, 40, and 80

ounces. The largest of the Castle Howard vessels holds 92 ounces, thus agreeing with *neither* of the two sets mentioned. It will *not* do to imagine any discrepancy, but, in fact, we are still minus the true key to these measures of capacity, if such they were, and Mr. Oldfield's ingenious suggestion but supplies an inkling of the system or design pursued. It must be conceded, however, that all these vessels in point of capacity bear *some* certain or definite relation to one another.

From the above remarks, made in no *ex parte* spirit, but with every desire to arrive at the truth, it will be apparent to all, that I can see no occasion to alter the title, or even to modify materially the memoir submitted in the preceding pages. The conviction remains strong as ever that the greater portion of the bronze vessels ordinarily termed skillets or saucepans, and certainly all the plain ones—whether precise measures or no—were *mainly designed for culinary purposes*. The more ornamented vessels, and such as were made of silver, on the contrary were doubtlessly designed for the service of the altar. The other Abergele utensils I still consider to be simply such as would be used at the table of a military officer or civilian of position.

THE LAST POPULAR RISINGS IN THE LANCASHIRE LAKE COUNTRY.

By A. Craig Gibson, F.S.A., Hon. Curator.

Read 28th January, 1869.

In former papers I have treated of the character of the people of the English Lake Country, and I may here note, that in no important respect do the natives of the portion of the said beautiful district, comprised within the boundaries of Lancashire, differ from the dalesmen generally. I believe I have said that they are not easily roused to anger or driven to combination, but that, wherever sufficient cause has arisen so to arouse or so to impel them, they have shewn a remarkable spirit of determination, a vigorous, but temperate, almost a peaceable, resolution to right themselves when they believed they were wronged, which, combined with a disregard of the probability, or rather the certainty, of very serious consequences, presents a phase of character evinced, so far as I can remember, by the people of no other part of Her Majesty's dominions.

Very few instances of the active development of this peculiarity of character remain upon record. More doers than talkers, and still more so than writers or recorders of their deeds, the dalesmen have failed to hand down any story of exploits performed by them before the beginning of the present century; and it is only through having conversed with surviving actors, and having obtained information at second hand, that I am enabled to present an authentic account of two remarkable demonstrations of the old resolute spirit of the dales exhibited about the time I have mentioned.

In the years 1799 and 1800, as history informs us, this country was visited by a dearth of provisions amounting to an actual famine, the consequence of deficient crops and bad harvests, aggravated probably by wars which many of us now think unnecessary, therefore iniquitous, and by legislation which most of us now deem injudicious. Wheat, which in January sold at six shillings a bushel, reached at the end of the year eleven shillings and eightpence; the averages ruling at upwards of one hundred shillings a quarter, and the four pound loaf selling at two shillings.

The government of the time did what they thought might be done to alleviate the sufferings of the people, by such peddling measures as prohibiting the consumption of grain in distilleries and issuing proclamations against the sale of new bread. As may be imagined enactments such as these went a very little way indeed towards increasing the supply of breadstuffs, or reducing prices in the markets. The poor all over the country were kept agonizing on the verge of starvation, many died of absolute want, and, doubtless, many more, in numbers then unnoticed and now unknown, sank under the diseases which unfailingly accompany or follow the long continuance of physical privation.

The famine was everywhere, and bread riots were common and alarming in many parts of the country. Of these risings, which, holding their causes in view, we may hardly condemn, and certainly cannot wonder at, one of the most remarkable in its progress, incidents, and conduct, had its birth in the district I have indicated. The distress, as I have said, was universal and severe, and nowhere did it make itself felt more heavily than in the dales of High Furness. The great bulk of the population there was, as indeed it is still, dependent upon the work furnished by the slate-quarries and mines; and unlike the miners of Coniston in more recent times, those workmen were all natives of the dales—sons, brothers, and

other relatives of the small proprietors, then a much more numerous and a more primitive class than now. Their staple article of food was oatmeal, and that article, at the date specified, rose in the local markets to the terrible figure of eight shillings per stone of fourteen pounds, or more than four times its usual price; moreover it was procured with much difficulty and trouble even at that exorbitant rate. Everything that could be converted into food was consumed. A resident in Seathwaite told my informant that, having occasion to walk to Kendal in June, 1800, a distance of, say, five and twenty miles, he noticed that nowhere near his road could he see a single specimen of that generally most abundant plant the common nettle—all had been gathered as they sprung, and cooked in some fashion, to ward off the starvation that threatened the people so closely and so long.

The quarrymen and miners, then, of High Furness were come of a race not easily roused to united or unwonted action; but so roused, given to carrying out their objects with an impetuosity, resolution and daring hardly to be equalled; and when it came to be reported to these men and discussed by them during their hours of rest or of labour, that the scantiness and dearth of oatmeal were due, not as they had thought to exhaustion of the stocks in Low Furness, whence, mainly, their supplies had been drawn, but to the millers and dealers in and about the town of Ulverston withholding their stores from market, with the design of forcing still higher the already famine-causing prices, it was resolved that they should rise in what strength they could command and read these regraters and forestallers, as they were led to consider them, a lesson they might not soon forget or cease to profit by. With this determination they began their gathering in Langdale at very early morn, and marching southwards received accessions of strength in Tilberthwaite, Yewdale, Coniston and Torver. And so increasing like a snowball as it rolled

down the valleys, the little army, undisciplined but orderly and united, arrived at the Kirkby slate quarries in Low Furness, where the men at work were compelled to join its march. Hence we may infer that this expedition, any more than most others, did not consist entirely of volunteers. From the slate works of Kirkby, now of vast extent, these self-constituted redressers of supposed wrong, made their way across the high moorlands to Pennington. Approaching the mill near to that village they could see the miller and his servants running as for their lives up the hill beyond. They found no great quantity of flour or meal in store there, but helped themselves each to a handful of dried beans which they ate as they continued their route. One of the latest survivors of this strange *emeute*, in my time a well-to-do carpenter at Coniston, has told me that he found his handful of hard beans a most welcome and enjoyable meal, half-famished as he was by his long march and previous short commons, for even respectable mechanics like him were sorely pinched by the prevailing dearth.

From Pennington they directed their course by Swarthmoor to the mill at Bardsea. The miller there remained at his post, held parley with the invaders, exhibited his stores, and promised to expose it all for sale in Ulverston on the next market-day. He likewise, in acknowledgment of their orderly conduct, presented them with money for refreshment at the adjacent public-house.

They then resumed their march upon Ulverston—the principal goal of their expedition—and entered it by the suburban thoroughfare called "the Ellers." Proceeding up the street and making their errand known, they were slyly directed by certain women, who came to their doors to see them pass, to a large barn, used for the time as a warehouse for flour. The door of this building was fastened inside, and so, for some time, retarded their operations; but whilst they were

debating upon the means of overcoming this trivial obstacle, the man already alluded to, found a crevice by which he was able to introduce his hand and, unnoticed, to slip back the fastening, allowing the door to fall open.

A large store of flour and oatmeal was discovered here, concealed under straw, so far tending to confirm their suspicions and verify the information they had received.

Having procured hand-carts they began to carry the loaded sacks to the market-cross, where, while some continued to bring up fresh supplies, others announced that the contents of the sacks were to be given to all comers without money or price; and began at once their distribution. In a remarkably short time, numbers of women came with bags, pots, pans, tubs, and all sorts of receptacles—some of them usually applied to very different purposes—to carry away the food thus unexpectedly and, as they felt, providentially offered for their acceptance. Those women who came unprovided with other means of carrying it away were called upon to "hold their "brats," and received apronfuls as heavy as their strings would bear. When a sack was getting almost empty, she who happened to be in turn, for a sort of order was observed, was given what was left with the sack to carry it home in. My old neighbour was struck with the stature and apparent strength of some of these women, and always declared his belief that many of them were men in women's clothes.

A great number of loads were disposed of in this summary manner, the owner looking on and addressing an occasional remonstrance or entreaty, for long disregarded, to the distributors. But when the number of recipients had considerably diminished, and some of the well-known and respectable inhabitants of the town added their remonstrances to those of the unfortunate dealer, the rioters, for so we must deem them, their object being not spoliation but warning, stayed their proceedings while a considerable quantity of the stock yet

remained unseized, and, accepting the solemn promise of the proprietor that he would bring the whole of his still remaining store to market on the three market-days next ensuing, they carried their attentions elsewhere.

Several millers and other holders of meal and flour were visited, promises to sell exacted, and threats held out that, if those promises were not fulfilled, they would return and enforce their fulfilment in the manner of which they had just given an example.

Matters being so arranged, the dalesmen left Ulverston and made their way, as they best could, to their several homes, which they all reached, weary and foot-sore after a day's march which in many instances exceeded fifty miles.

The most remarkable circumstance connected with this daring defiance of the law was, that no one was punished for taking part in it. None could be called ringleaders, inasmuch as all were equally active and eager, and the plan of proceeding being probably pre-arranged, no orders had to be given and no one had to direct. The local magistrates may have compassionated the distress that incited the demonstration, and some of them might not altogether disapprove of its object or results, illegal though it was. It may also have been taken into consideration, that though the rioters were virtually or rather actually masters of the situation and of the town—with its shops, houses and *public*-houses—for several hours, and had it in their power to perpetrate any amount of mischief and damage, no violence was offered to any person, and no injury to property beyond what was necessary to achieve the declared object of their visit. Many of the men engaged in the affair were personally known in Ulverston, and no attempt at disguise or concealment was practised during their lawless proceedings, which were all carried out in the broad light of day, yet, as I have said, the

authorities took no steps to bring them to justice, and no prosecution was instituted against any one concerned.

Whether emboldened by this immunity from punishment or goaded to desperation by what they felt to be a grievous oppression, the same men, a year or two afterwards, made a second descent upon the same Market Town. On this occasion the draughts upon the people for recruiting the militia regiments were the *primum mobile* of the rising. Year after year they saw some of their relatives or their neighbours compelled to leave home under the operation of the ballot for the home branch of military service, and heard afterwards of their being drafted into some regiment of the line, and then, in many instances, never heard of them more. The system, as worked early in this century, amounted in fact to a conscription which, if not so universal as that practised in France, was quite as oppressive upon those to whom the lots fell. They did not recognize the necessity of the continuous drain upon their numbers or of the wars that demanded it. In case of invasion they would one and all, so they said, have volunteered to serve against the enemy, on the understanding that, like their forefathers, they should return to their homes and ordinary avocations after such invasion had been repelled and the safety of the country secured; but this annually recurring impressment of some of them to go fighting abroad they at length determined to resist, and to resist it in their own fashion.

With this resolve they again gathered in force and marched, this time, directly upon Ulverston, on a day when the magistracy and other county officials were sitting to arrange the militia ballot for the year. Forcing their way into the building where the authorities were thus engaged, the rioters ordered them to drop their proceedings and get out of the place; and seeing the threatening aspect of the men the magistrates and others, with one exception, had the discretion

to retire as commanded. The exception was Mr. Justice Brooks, father of the late Archdeacon of Liverpool, who, exhibiting a resolution to stand his ground, was seized by rude hands and thrust out of an open window, a gigantic and powerful miner of Coniston, named Park, grasping his ancles and suspending him for a time head downwards over the crowded street. This was the only personal violence they committed, and even Mr. Brooks was let off with the indignity and the fright, being hauled in again at the window and allowed to follow his colleagues, which, seeing the futility and danger of resistance, he did. The rioters, for so again we must call them, then collected all the books and papers they could find and carrying these to the market cross made a bonfire of them, despite the reading of the Riot Act and an occasional feeble demonstration on the part of the town constables, who were kept at bay chiefly by a slate worker named Wilmot, brandishing in their faces a large club-headed stick on which he had carved the head of a man, and called by the title of "Charley Fox the Peace-maker," which serves to indicate the political leanings of the dales people of that period.

Having thus, as they fancied, accomplished their object, they left the town without committing any further damage and again made the best of their way to their mountain homes.

Unlike the meal riot this was thought by the insulted authorities to demand punishment, and, the names and residences of many of those implicated being known, a small body of horse soldiers was sent to effect their capture. The military were seen riding up the road on the water-side, by two men engaged in fishing for char near the foot of Coniston Lake, who, guessing the errand of the redcoats, abandoned their net, and pulled with all their might directly up the lake to the village of Church Coniston, a distance of five miles,

and gave the alarm just in time to enable the culprits who happened to be there to escape to the fells and secure themselves in natural fastnesses inaccessible to military, whether horse or foot. Failing in their object at Coniston, the soldiers continued their march up the vales of Yewdale and Tilberthwaite—their drawn swords, as I have been told, flashing brightly in the sun. The men of Tilberthwaite and Langdale, however, had received notice from Coniston of the approach of the soldiers, and just had time to make arrangements by which, as the military entered the large excavated chambers of the slate quarries by the levels or drifts, they were able to clamber out at the top by means of ropes or ladders, and so to escape also to the mountains. A workman named Forster, I have heard, was left in one quarry upon a "gant" or small suspended platform on which he had been working, half-way up the face of a high crag, without means of escape, and trusting to the security of his position he treated the baffled soldiery to a great abundance of chaff, while they kept menacing him with their firearms and ordering him to come down, an invitation which he declined, asking them in turn to come and take him. Either feat being impossible the soldiers retired and rode quietly away down the valleys; the quarrymen returning coolly to their labour, only taking the precaution of planting look-outs in such positions as commanded the approaches.

These attempts at capture were repeated from time to time but always without success. The scouts performed their office so perfectly that the men, whether at work or at home, always received such warning as enabled them to make good their escape. Occasionally a false alarm was given—anything scarlet being held in fear—as when an old woman in a red cloak happened to be seen by a distant look-out, crossing the little eminence in Tilberthwaite called the "Horse Crag,"

and set all the workers of all the quarries in the neighbourhood scampering over the fells.

But this could not go on for ever. Some of those most deeply implicated migrated over the hills into Cumberland and wrought at the Borrowdale and Buttermere slate-works. One or two made their peace by enlisting, and a few who possessed property, amongst them a landed proprietor and lessee of slate quarries, of Tilberthwaite, an influential man there, who had imprudently made an encouraging speech to the rioters from the market cross at Ulverston, gave themselves up; but when, after traversing over the first assizes, they appeared at Lancaster, the Government withdrew the prosecution, and they escaped with the payment of rather heavy costs.

So ended, somewhat ignobly, the latest demonstrations of the old defiant spirit of the dales. More than forty years after their occurrence I have heard them talked of by some who took part in them, but talked of in a manner so disjointed and obscure, as to the order and succession of their incidents and the nature of their causes and objects that, but for the aid of an obliging friend, born in and belonging to the vicinity, who, at earlier dates, had availed himself of the fresher recollection of these events then existing, and so obtained and preserved an accurate knowledge of their details, their origin and results, I had not been able to place on record even this imperfect history, and it is probable that, like many earlier, more important, and more interesting affairs of the same nature, they would have fallen into the same oblivion which has enshrouded nearly all that has happened in the Lake Country since the days of Dunmail, who died—"Last King of rocky "Cumberland"—almost a thousand years ago.

OBSERVATIONS ON POPULATION STATISTICS.

Part I.

By Thomas A. Welton.

Read 17th December, 1868.

The importance of statistical enquiries is now so often illustrated and so generally admitted, that it would be needless to enter into a discussion on that head. But the greater the value of faithful and clear testimony, the more urgent is the necessity that we should learn to discriminate between such, and the misleading and imperfect evidence with which it is often associated. Not only is it desirable that incorrect inferences should be discredited, but it is equally so, that the censures of those writers who for the purposes of their argument may find it convenient to condemn statistics in the mass, should less frequently receive a partial justification.

In order to reduce within narrow limits the uncertainty which even attends deductions from numerical evidence, it is necessary, first, that the facts should be carefully recorded, so as to render the basis of calculation as complete, and as free from errors and omissions, as may be possible; next, that such facts should be arranged in a scientific manner; and lastly, that all circumstances tending to obscure the true results should be taken into account, and their influence eliminated, being approximately measured for that purpose by the aid of observation and comparison of kindred cases.

The field of statistical investigation is so large and so imperfectly explored, that it would be impossible, at present, to reduce the practical results of these general principles into the form of a treatise. All that can be attempted here is to exemplify the spirit in which such work should be performed.

The statistics of population are of universal interest, and will furnish many illustrations of statistical methods.

The numbers, the migrations, the ages, the mortality, the civil condition and the increase of nations, all have an evident connexion with their power, their happiness, or their progress. But these facts are but half understood, and the causes of their inequalities and fluctuations are only obscurely guessed at, by those who have not attended to the statistics of industry. It is proposed, therefore, in the first place, to examine the British Census of Occupations.

Occupations of the People of England and Wales in 1861.

It is necessary for the freedom of discussion so essential to the ascertainment of truth, that no deference should be paid to official or other authority beyond that which is properly due. But as to matters which are not within the scope of ordinary criticism, because their examination demands much time and labour, and offers little or no present recompense, there exists no standard by which the public can measure the claims of different authorities. There is no choice, therefore, but between an unconditional acceptance of official books, (with perhaps a few others by writers who have attained reputation,) and that personal investigation for which so few can find time. Hence in statistics, authority has become too much the arbiter of the public judgment, and is confined within the narrowest limits.

The writer devoted considerable pains to the re-arrangement of the English Census of Occupations for 1851. Some important improvements have been made in the last census, but it is not denied that much remains to be done. The Commissioners have indeed reprinted verbatim the remarks which they made in 1851, and which formed the motto of the work in which the writer's criticisms were embodied, viz.:—

"With the knowledge that has now been acquired, a "further enquiry may, we think, be instituted with advantage "into the industry of the country in all its ramifications; a "nomenclature be laid down; the various subdivisions of "labour be defined; and the classification be finally revised,

"so that at the next census the foundation may be laid of a "complete knowledge of the organization of the labour of "Great Britain. Such an enquiry would in many ways be "useful, and tend at once to extend science, to promote "production, and to dissipate subversive theories."

Their idea of an improved classification seems to be,* that it should be based on principles so precise and exhaustive as to indicate a place for every possible occupation.

This is an attractive object, but not one which should be unconditionally pursued. It appears to have directly led to the abandonment of any attempt to separate the manufacturing from the trading classes.

In the Appendix to the Report of the Commissioners we find (Table 82) an interesting statement of the proportions of the adult population of both sexes belonging to each of the great classes which they have adopted. The following figures are extracted therefrom :—

	(Year 1861.) To every 100 Persons aged 20 years and upwards.					
	I. Professional.	II. Domestic.	III. Commercial.	IV. Agricultural.	V. Industrial	VI. Indefinite and Non-Productive.
Division—						
London	5·9	41·1	8·4	1·6	36·1	6·9
Regist. County—						
Buckingham	2·7	30·6	1·9	25·4	33·0	6·4
Huntingdon.....	2·7	38·5	1·8	30·8	20 9	5·3
Cornwall	2·9	39 7	3·6	18·8	31·1	3·9
West Riding of York ..	2·0	35·4	3·2	9·8	46·0	3·6
Regist. District—						
Bath	5·6	41·6	3·4	6·9	32·8	9·7
Oxford	4·8	44·5	4·7	2·9	36·5	6·6
St. George, Hanover Square	7·6	55·1	5·2	1·9	24·4	5·8
Liverpool	2·4	40 8	19·1	·9	30 0	6·8
Hull	3·8	40·9	16·8	2·1	30·0	6·4
Sheppey	41·2	36·3	2·8	7·4	10·3	2·0

* See Dr. Farr's very remarkable essay, appended to the General Report of the Census Commissioners for 1861. The doctrines there expounded would require more space for their due examination than can here be afforded.

From this table we gather, first, that common soldiers and sailors being included in the professional class, the ratios resulting are almost unintelligible; secondly, that miners, traders, and manufacturers being included in the industrial class, the ratios derived from such a combination are of not much greater value; and thirdly, that the domestic class, being enlarged not only where servants are in request, but wherever hotels and other places of entertainment abound, and being diminished wherever women are employed in trades, manufactures, or agriculture, the ratios do not indicate with regularity either the preponderance or absence of the richer classes, or the degree of comfort enjoyed by the masses.

The figures for 1851, subdivided by the writer's original method, and shewn separately for males and females, are as under:—

	(Year 1851.) To every 100 Males aged 20 years and upwards.								
	I. Agricultural.	II. Mining.	III. Manufacturing.	IV. Trading	V. Commercial.	VI. Menial.	VII. Professional.	VIII. Governmental.	Unclassified.
Division—									
London	2·3	·0	10·6	43·9	17·0	4·6	3·3	7·1	11·2
Registration County—									
Buckingham	48·3	·0	2·1	29·3	5·0	2·5	2·0	1·4	9·4
Huntingdon	53·9	·0	1·1	27·2	6·4	1·7	1·9	1·4	6·3
Cornwall	32·7	24·8	2·2	23·5	7·3	1·0	1·5	2·7	4·3
West Riding of York	15·8	5·2	36·6	26·8	6·2	1·0	1·4	1·2	5·7
Registration District—									
Bath	13·1	1·9	4·6	44·1	9·1	6·3	4·4	4·4	12·0
Oxford	4·4	·0	4·8	45·3	10·6	9·8	6·5	2·4	16·2
St. George, Hanover Sq.	1·4	·0	4·1	33·8	13·8	24·1	5·2	8·5	9·1
Liverpool	1·6	·2	6.6	36·2	33·5	1·4	1·8	2·9	16·0
Hull	3·5	·1	6·0	40·9	33·8	1·3	1·6	3·3	9·8
Sheppey (Sheerness)	15·9	·0	·9	14·5	4·6	·7	1·2	57·2	5·0

	(Year 1851.) To every 100 Females aged 20 years and upwards.								
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	Unclassified.
	Agricultural.	Mining.	Manufacturing.	Trading	Commercial.	Menial.	Professional.	Governmental.	
Division—									
London	·3	·0	2·3	20·6	·2	18·1	1·7	·0	56·8
Registration County—									
Buckingham	7·0	·0	22·2	11·5	·1	8·7	1·2	·0	49·2
Huntingdon	8·7	·0	3·4	11·4	·1	8·1	1·5	·0	66·9
Cornwall	11·8	2·3	·3	11·5	·2	8·8	1·0	·0	64·1
West Riding of York	6·1	·0	14·8	11·4	·3	6·4	·9	·0	60·1
Registration District—									
Bath	2·0	·0	1·1	24·3	·1	25·5	2·0	·1	44·9
Oxford	·4	·0	·5	23·1	·2	17·6	2·1	·1	55·9
St. George, Hanover Sq.	·4	·0	·4	14·2	·1	37·3	1·7	·0	45·8
Liverpool	·3	·0	·9	20·2	·3	15·3	·7	·0	62·2
Hull	·4	·0	·9	19·4	1·3	10·8	1·1	·0	66·0
Sheppey (Sheerness)	1·8	·0	·2	11·1	·1	6·9	1·3	·1	78·6

It will be said, no doubt, that these last Tables are unscientific, as not being the result of the application of such exhaustive dicta as have been referred to. The reply is two-fold: first, that the data of a census of occupations must necessarily be somewhat inexact, so that the result of the most scientific principles, applied to such data, must at best be imperfect; next, that whilst the process I have adopted yields ratios which if substantially correct are intelligible and valuable, the degree of inaccuracy and uncertainty attending it is practically not considerable.*

I. To begin, then, from the foundation, it is requisite to note that the varying degrees of subdivision of labour, in the manufacturing and other districts, occasion considerable difficulty in the work of classification. Another even greater difficulty is occasioned by the fact that men often follow two

* The figures last given are derived from the Census of 1851, and beyond doubt, changes occurred in the proportions of persons belonging to the several classes during the succeeding decennium, but it would be difficult to gather from the Government table of ratios for 1861 (as shewn above) any idea of the nature and extent of such changes.

or more pursuits, or unite several trades in one establishment. Many unite the occupations of grocer and draper, innkeeper and farmer, &c., especially in thinly peopled districts. It being contrary to the principle of a census to reckon any person twice over, the enumerators were instructed to return each man under his occupations in the order of their importance, and in the general tables he was placed under that standing first in order.

These circumstances do not materially diminish the value of the census of occupations; for if errors are unavoidable, they also must to some extent counterbalance each other. The total numbers in each class probably approximate closely to the truth, especially as great care was bestowed on the collection and manipulation of the facts, a large number of intelligent men being employed as enumerators, and the papers being carefully perused and corrected by the local registrars as well as by experts at the chief office.

It should further be mentioned that, with a view to ascertain the total number of persons belonging to each class, all unemployed, disabled, and aged persons (including paupers, lunatics, and prisoners in gaols), were ranked according to the nature of their usual or former employments.

Their occupations being returned by the people themselves (except in a few cases), it is natural to suppose that in many instances the most creditable rather than the most important occupation has been filled in. Thus the "dangerous classes" hardly appear under their right description (except that there are a few "prisoners of no stated occupation" in the gaols), and it is probable that many of these altogether escape enumeration. How easily this might occur may be judged from an instance known to the writer, of a London shopkeeper who omitted all his lodgers (not wishing it known that he had any), and who also omitted his two elder daughters rather than declare their ages.

Tables are given shewing the occupations of prisoners, lunatics, paupers, and others, so that, if necessary, the non-effectives actually under public supervision may be deducted from the roll of our industrial army: the aged also may be excluded by the help of another table, but the idle and the vicious cannot of course be eliminated.

It will be seen that every one of the matters which have been referred to, is of a nature to operate in all communities with no very unequal effect.* The gross figures are, therefore, accurate enough for purposes of comparison one with another, and for some objects (such as comparison with recorded deaths) are preferable to any others. Yet there is abundant room to believe that, even by the aid of an absolutely perfect system of classification, we could not derive exact results from such data, however satisfactory they may be for every practical purpose.

II. In order to shew that the ratios obtained by my rough method are intelligible and valuable, *if substantially correct*, it is necessary to consider that information of this nature is sought for the purpose of obtaining a faithful picture of the industrial character of a population.

On examining an unclassified return of occupations with this purpose in view, the first process of the mind is to disentangle from the mass of every-day employments, those which give to a district its distinctive character. The next is to consider whether there be any remarkable excess or deficiency in the proportion of the residue to the total number of inhabitants, and, if so, how it is caused.

The tables have been arranged with a view to anticipate this labour. For example, the Cornish ratios just given, taken in connexion with the national averages, shew that

* The varying proportion of old persons in different places may, however, be noticed, as well as the fact that at high ages the employments are not the same as in middle life; hence the exclusion of the old would affect different occupations diversely.

agriculture is the principal employment there, and mining next; that commerce and manufactures are not largely developed; that Government servants are far from being numerous; and that the residue (composed of the trading, menial, and professional classes, and those who are unclassified), is decidedly under the average. If the ratios of agriculturists and miners to *area* be next considered, it is seen that the former are rather fewer than the average, and the latter unusually numerous.

We have, then, a county remarkable for its mines, fairly cultivated, almost destitute of manufactures, and with little commerce. There is no trace of its being a chosen residence of the rich;—the small number of the menial and professional classes even forbids such an idea. The low ratio of the trading class points to the probability that the proportion of population resident in large towns is not great, and further suggests

First,—That the county is probably supplied in some measure from a neighbouring emporium beyond its borders;

Secondly,—That the inhabitants, perhaps, live simply and do much for themselves which is elsewhere performed by traders;

Thirdly,—That if the preceding suppositions are incorrect, the means and enjoyments of the inhabitants must fall below the average.

As to the correctness of the picture thus derived from a few figures, every one may form his own opinion. By subdividing some of the classes, further insight may of course be gained: it then appears, that there is a high proportion of persons engaged in seafaring pursuits, but a remarkably small one of inland traffickers; and also that those classes of traders who deal in food and dress are strikingly deficient, the ratios being lower than in any other English county.

The clearness and value of the results obtained may now,

perhaps, be admitted; but it may be urged that the Census Commissioners have subdivided their classes into orders, the ratios derived from which would be equally instructive. This is so far true, that amongst the orders are distinguished—

Persons engaged in the defence of the country.
Do. working and dealing in minerals.
Do. do. in the textile fabrics and in dress.
Do. do. in food and drinks.

The manufacturers, however, are not separated from the traders, nor the miners from the metal workers. The eighteen orders, therefore, fail to give the certainty either that mining is a leading industry in Cornwall, or that manufacturers are few. Nor is there more than very imperfect evidence as to the magnitude of the trading class.

It may still be urged that the tabular arrangements used in the census are avowedly provisional: to which the answer is, that so long as the principle is adhered to which forbids any attempt to separate the traders from the manufacturers, so long must the results be deficient in clearness, and, consequently, of small value.

III. There remains the question as to whether the degree of inaccuracy and uncertainty attending my mode of classification is practically inconsiderable. We cannot judge of that until the method itself shall have been expounded and illustrated. This shall be proceeded with without further reference to the census arrangements.

Method of Classification.

It should be stated at the outset, that the method now to be explained is not exactly the same as that set forth in my previous publications. More careful examination of the leading facts which were brought to the surface by the method at first pursued, has led to the adoption of several important

modifications. It may, however, be well to shew roughly the result which the old method would have produced if applied to the census of 1861; an exact comparison being rendered impossible by the changes introduced in the census classification—

	Males aged 20 yrs. & upwards.		Females aged 20 yrs. & upwards.	
	1851.	1861.	1851.	1861.
I. Agriculture	1,948,430	1,939,085	351,948	318,490
II. Mining	206,058	266,460	4,727	87
III. Manufactures: (a) Textile	333,156	329,492	236,139	336,355
(b) Metallic	207,079	297,816	18,136	23,851
(c) Other	84,651	99,889	48,561	56,496
IV. Traders: (a) Dealing in food, drink, &c.	311,964	357,109	119,376	140,863
(b) Dealing in Clothing	323,060	325,636	515,662	624,132
(c) Builders & others engaged about houses.	381,618	448,171	34,614	45,630
(d) Workers in wood	91,500	106,531	5,915	8,570
(e) Do. metal	100,541	110,543	547	781
(f) Other traders	198,081	230,001	42,563	41,105
V. Commerce: (a) Merchants, clerks, &c.	58,812	87,729	30	3,348
(b) Inld. conveyance, &c.	276,416	351,030	8,280	8,543
(c) Sea navigation, &c.	119,576	165,719	3,226	4,647
VI. Menial Occupations	105,829	114,050	580,768	690,092
VII. Professional do.	95,344	107,610	61,974	73,556
VIII. Governmental do. (a) Intl. admin.	67,245	74,731	1,893	3,007
(b) Defence	91,478	133,902		
Totals	4,300,140	4,845,504	2,084,089	2,369,473
Unclassified	416,873	385,069	3,015,495	3,383,512
Grand Totals	4,717,013	5,230,573	5,099,584	5,752,985

This table shews an immense increase in the number of miners and metal manufacturers, of merchants, inland traffickers, and seamen, and of the Government service, but comparatively stationary or retrograde numbers of manufacturers of textile fabrics, and of agriculturists. These figures point to the most potent influences which have during the last twenty years been acting on the national industries; such as free trade, railways, the great increase of production of minerals fostered by railways, the augmented armaments consequent

on political inquietude, and the effect of improvements in machinery, in increasing production without demanding the services of so many skilled workers as heretofore: liberating consequently great numbers of workpeople whose services were urgently needed in other departments.

As respects the Secondary Classes, there are indications of an altered distribution of labour, especially in the clothing trades; and, on the whole, there is some evidence of an improvement in the condition of the people.*

The above remarks will in some measure have illustrated the spirit in which I think this subject should be approached; it remains to give a condensed statement of the maxims according to which the new classification has been regulated.

First, the division of the population into primary and secondary workers is necessary for the sake of clearness, and is founded on natural laws.

Every population must depend primarily on some means of subsistence, such as agriculture, manufacturing industry, mining, commerce, fishing, or some public need which it subserves.

Every population must include persons who are *not* engaged in the predominant industry or industries of the place, but who furnish all manner of needful supplies to the others, perform all kinds of services, and subsist according as they or their wares are acceptable to the population amongst whom they live.

Those who are occupied in agriculture, mining, or any of the other industries on which populations primarily depend,

* The changes I have made in my classification tend to increase the numbers considered to belong to the Primary Classes. According to the old arrangement there were in 1861—

Primary Classes	2,620,092 men.	733,204 women.
Secondary do.	2,225,412 do.	1,636,269 do.

but on the plan now adopted there appear to have been—

Primary Classes	2,933,863 men.	754,385 women.
Secondary do.	1,922,525 do.	1,618,115 do.

are numerous or few according as the capabilities of the place are great or highly developed on one hand, small or undeveloped on the other. Nothing but the extent of subject matter on which they can work need limit their numbers. These are the Primary Classes.

Those who are occupied in supplying the wants of others, find in them their subject matter, and according to the numbers and expenditure of the population amongst whom they live, will they be few or many. These are the Secondary Classes.

These secondary classes are not, however, equally distributed throughout any population. For the public convenience they are chiefly congregated in towns, to which the primary classes and the public generally resort. And it must be noted that each secondary worker is in the same relation towards secondary workers of other descriptions, as towards primary workers. To the butcher, almost all persons except butchers, whether they be manufacturers, miners, merchants, or shopkeepers, are alike customers.

If, then, we desire to measure truly the numbers of the secondary classes, we must not compare towns with rural districts, but must endeavour to compare town with town, including or excluding in each case the surrounding districts dependent on the respective towns for the greater portion of their supplies.

It is evident that the ratio of secondary workers *must* as a rule be higher in towns than in country places; and especially in places which have long been the emporia of important districts. It is clear, then, that the ratios of primary workers must be lowest in towns, even where the same primary industries form the sole support of both town and country.

The true measure of the prevalence of particular primary industries is, therefore, the total *primary* population. The true measure of secondary industries is the total population of all ranks within the district which they serve.

Next, with regard to the application of the above rules. The boundaries of the districts which particular towns may be assumed to supply, can only be adjusted on the supposition that, although trading enterprises differ very much in their scope, yet by attributing to each town an area in some degree corresponding with the numbers of its traders, its boundary being modified by natural impediments to traffic, and limited by like areas being ascribed to other towns, a fair approximation may be arrived at. The transactions of the townsmen which happen beyond such a boundary may be assumed to equal those of outside traders which take place within it. This is all hypothetical, but then all averages rest upon such bases, and yet it is found that however little their positive value may be, their relative magnitudes have often great significance. Densities, for example, ought to be read with the proviso—"if the population of a certain district were "equably distributed, there would be so many persons on "each square mile," and rates of increase should be read—"if every hundred persons within the district had increased in "a like ratio, there would have been so many persons added "to each."

Even if the districts assigned to the several towns were perfectly appropriate, the ratios of population belonging to the secondary classes in such districts would not be uniform, although they would tend towards uniformity. Not only would there be different degrees of wealth diffused amongst their populations, and consequent differences in the average expenditure of the inhabitants, but in dense active populations the secondary workers would be more *efficient* than in those of the opposite character; moreover, the degree to which custom renders people dependent on shopkeepers and others for articles of daily use is much greater in some places than in others, so that even a small and not very efficient secondary population may be consistent with general wellbeing,

provided the mass of the people are accustomed to home work, wear homespun clothes, eat home-baked bread, and drink home-brewed ale.

The lavish expenditure which takes place wherever the wealthy resort for recreation causes the secondary classes to attain large proportions in fashionable watering places. On the other hand, some towns are so purely hives of industry, and are so completely overshadowed as to retail trade by some famous mart at no great distance, that in them the secondary classes exceed the average of the nation in a very trifling degree.

One of the phenomena which is most useful in determining to which of the two main divisions any given occupation should be assigned is this. The primary classes may be combined in any proportions : one place chiefly depending on mines, another on some manufacture, a third on agriculture, so that a knowledge of the number of manufacturers by no means helps us to the most remote idea of the number of agriculturists. The reverse is true of the secondary classes. From the numbers of the building trade, a conjecture may be hazarded as to those of butchers and bakers, and *vice versa*. It is true that the ratios between tailors, butchers, bakers, and builders are by no means uniform ; yet there is a sufficient approach to uniformity to arrest the attention of the observer.

On the other hand, the great difficulty in the way of a perfect classification on the principles just laid down, is the impossibility *in practice* of drawing an indisputably correct line between the class of manufacturers and that of traders. If we were accurately informed for what market each man toiled, whether indifferently for the home consumer and the foreign trader, or specially for a small circle at home, and in the latter case whether for a section of the general public or for a peculiar class ; we might probably assign to each his true place in such a classification. But we are not only

debarred by the nature of things from obtaining such complete information: we are aware also that many men have two or more occupations to depend upon, and that consequently nothing better than an approximation to correct results is within reach.

The rough distinction between those "employed in manu-"factures carried on in certain localities for other than local "consumption," and those "engaged in the preparation or "manufacture of articles for local demand, and in retail trade "generally," requires to be supplemented here and there. For example, makers of tools and implements in local demand for the especial use of particular orders of manufacturers should be added, if possible, to the ranks of the manufacturers whom they serve, and, at all events, included among the primary classes. It does not follow, however, that coach-builders and harness makers should be classed with those engaged in inland traffic, shipbuilders and sailmakers with those engaged in foreign commerce. Each of these occupations must be deemed primary as respects the public at large. For example, coachbuilders are not unfrequently collected into a few localities, so as to render their business a remarkable manufacture, and therefore should be separated from the more widely diffused class of coachmen and others engaged in the management of vehicles,—itself deemed secondary in its nature, because dependent in the main upon the occasional wants of the community among whom it exists.

Some trades, notably that of shoemaking, become important manufactures in a few places, although usually restricted to the supply of local wants. In such cases, there being no question but that the class is *usually* secondary and *occasionally* primary, and there being, further, no room to pretend to absolute accuracy in such statistics as these, it is probably the best course, as it is the simplest, to ascribe to the manufacturing class any notable excess beyond the usual

proportional number of such workers. In doing this, it is probably best to treat each town or city as a unit, since the single circumstance of an unusual number of shoemakers being found in a particular suburb (the average for the whole city not being remarkably excessive), would hardly justify treating that suburb as the seat of a manufacture.

And here it is well to remark, that the enumerations made in this country have regard to the *homes* of the people—that is to say, the places where they sleep; and this method tends in no small measure to render obscure our information as to the degree in which particular trades may be localized in great cities. It affords also an additional reason for caution in using the occupation statistics of *parts* of large towns.

Manufactures which are apt to be widely diffused, partly because their material is as generally obtainable, and partly for the reason that greater concentration would entail needless charges for the transportation of a bulky article to the place of manufacture and thence to that of consumption, although they may be intimately connected with the supply of localities near which they are established, may still be deemed of a primary character. Millers, maltsters, brewers, tanners, and brickmakers need not be brought in contact with the general public, nor are they necessarily found in the neighbourhood of every great city.

It would not, perhaps, be safe to attach greater significance to the circumstances last referred to than would lead us to attend to them in doubtful cases; yet in such cases they afford considerable assistance. The mere fact that the proportional numbers engaged in an occupation of the nature of a manufacture vary exceedingly in different places, affords a strong presumption that the occupation in question is really a primary one, although in such cases as that of the patten and clog-making trade in Lancashire, which depends on a local want, the presumption would fail.

Some manufactures are carried on differently in particular localities. Watchmaking is a manufacture in Clerkenwell, but a mere trade in many other places, where the watchmaker obtains all the parts of his watches ready made, and puts together only a few for his customers. Such a man is as truly one of the secondary class as a tailor can be. In like manner the dyers of Manchester, or of Macclesfield, are largely engaged in executing wholesale orders, but in most parts of London dyers are merely shopkeepers, or at all events supported mainly by retail business. So with printers, there are on one hand large firms producing a multitude of publications; on the other small local men, who live by printing tradesmen's circulars and handbills, and executing odd jobs. Distinctions such as these might perhaps be effectually drawn, by means of special instructions to the enumerators, but nothing of the kind is shewn in the Census Tables, and indeed the principle on which they are framed is not such as to draw attention to the subject.

Those engaged in constructing railways, or in any temporary operation of kindred character, are naturally part of the primary class. They require supplies from the secondary traders, and afford none themselves.

Any occupation restricted by nature to certain places where the requisite physical conditions can alone exist, must be a primary one. Such are the employments peculiar to seaport towns.

There is some difficulty in determining not only the limit between the manufacturing class and that of traders, but also that between the traders and the merchants. The word "merchant" is so loosely used that, for instance, one cannot be sure how many out of the 5,586 timber merchants are strictly entitled to the designation. Certainly the number of firms who import timber from abroad is considerably under a thousand, and many of these are only in a small way of

business. The safest plan is, perhaps, to add a sub-order of wholesale dealers in staple articles to the mercantile class. This would lead future enumerators to distinguish more carefully between petty traders and true merchants.

As all these explanations would otherwise convey but a vague notion of my mode of classification, I annex a Table of the occupations of the English people in 1861, founded on the principles set forth, by the aid of which it may perhaps be possible to form an opinion on the third point which remained for consideration. (See *ante*, page 63.) Further light might be thrown upon the subject by an elaborate tabulation of the occupation statistics of groups of Registration Districts, a work which would however demand a separate paper for its proper treatment. The tables of per centages for some of the most important counties, which will be found at the end of the present paper, will shew, amongst other things, how the secondary classes vary in their proportionate numbers. To assist in explaining such variations, I subjoin the ratios of urban population given by the Registrar-General (Report, Table 45) :—

County.	Urban Population, per Cent.	Secondary Workers (Adult Males), per Cent.
Warwick	72.5	37.2
Lancaster	69.7	34.1
E. Riding (with York)	62.8	39.1
Gloucester	55.1	41.7
Chester	54.5	34.3
Northumberland	54.3	34.5
Stafford	53.9	29.2
West Riding	53.8	30.8
Devon	52.4	34.4
Worcester	52.1	33.5
Durham	49.3	28.8
Salop	35.5	31.4
Somerset	34.9	36.7
Hereford	25.1	31.9

It will be seen that the proportions of secondary workers do not follow the same order as those of urban population. This is partly because important marts such as Bristol, Birmingham, Newcastle, and York contain much larger proportions of traders than ordinary towns, and, standing on the verge of their respective counties, occasion the ratios within them to be unusually high; whilst they have a contrary influence on the ratios in the bordering counties, such as Stafford and Durham. The high ratios in Gloucester and Somerset are in a certain degree due to Cheltenham and Bath. In Lancashire and other northern counties, the secondary classes are probably more *efficient* man for man than in the counties further south,—not only because of the greater activity of their industrial classes, but also because of the denser aggregation of inhabitants in manufacturing than in rural districts.

TABLE I.—OCCUPATIONS, ENGLAND AND WALES, 1861.

IN CLASSES AND ORDERS.

Class	Order		Age 20 years and upwards.		Age under 20 years.	
			MALES.	FEMALES.	MALES.	FEMALES.
		Primary Occupations.				
I		Agriculture—				
	1	Agriculture and Grazing	1,215,673	318,258	332,766	60,185
	2	Fishing	13,967	1,107	3,025	581
II	3	Mining	271,552	655	102,579	313
III		Commerce and Navigation—				
	4	Commerce	121,003	3,348	22,261	181
	5	Navigation	120,855	422	20,550	21
IV		Manufactures—				
	6	Textile	316,844	324,847	135,057	212,330
	7	Metallic	306,255	24,356	97,824	20,100
	8	Other	366,359	80,862	90,920	43,928
V		Service of National Government—				
	9	Internal administration	27,465	530	1,013	37
	10	Army, Navy, &c.	125,209	..	20,730	..
VI	11	Occasional and insufficiently defined occupations	48,581	..	7,807	..
			2,933,863	754,385	834,542	337,676
		Secondary Occupations.				
VII		Trading—				
	12	Dealing, working in Dress	323,923	609,486	67,577	111,979
	13	" " Food, Drink, &c.	311,569	168,875	54,084	10,405
	14	Builders, &c., engaged about Houses	413,097	25,430	70,298	149
	15	Others	208,415	45,947	41,420	8,900
VIII	16	Inland Conveyance and Warehousing	389,027	7,978	109,392	2,801
IX	17	Attendants and Servants	108,692	680,662	35,401	378,550
X	18	Professional Persons	132,446	72,827	19,281	16,575
XI	19	Local Government and Police	33,855	3,883	449	84
XII	20	Insufficiently defined Occupations	1,501	3,037	2,049	1,493
			1,922,525	1,618,115	399,951	530,936
		Unclassified Persons	374,185	3,380,485	3,311,193	3,668,368
		Totals	5,230,573	5,752,985	4,545,686	4,536,980

TABLE II.—OCCUPATIONS, ENGLAND AND WALES, 1861.

IN SUB-ORDERS.

Order	Sub Order		Age 20 years and upwards.		Age under 20 years.	
			Males.	Females.	Males.	Females.
1	1	Agriculture and Grazing	1,136,379	316,577	323,468	60,000
	2	Arboriculture	7,922	7	995	2
	3	Horticulture	71,372	1,674	8,303	183
			1,215,673	318,258	332,766	60,185
2	4	Fishing	13,967	1,107	3,025	581
3	5	Mining	234,656	87	95,696	7
	6	Quarrying	36,996	568	6,883	306
			271,652	655	102,579	313
4	7	Mercantile	89,729	3,348	18,682	181
	8	Dealers in Staple Articles	31,274	..	3,579	..
			121,003	3,348	22,261	181
5	9	Sea Navigation	89,964	422	17,544	21
	10	Harbour and Dock Service	30,891	..	3,006	..
			120,855	422	20,550	21
6	11	Cotton and Linen Manufactures	149,701	158,605	80,062	120,659
	12	Woollen and Worsted do.	93,528	60,753	35,513	42,980
	13	Silk do.	34,074	49,347	10,065	23,521
	14	Hosiery, Lace, &c. do.	39,541	56,142	9,428	25,170
			316,844	324,847	135,067	212,330
7	15	Iron and Steel, Manufactures of	149,520	11,411	49,341	7,632
	16	Tin, Lead, Copper, &c., do.	45,977	9,043	17,011	9,475
	17	Engines, Machines, and Tools, do.	67,587	1,340	18,985	1,131
	18	Gold, Silver, Watches, &c., do.	33,684	2,139	8,943	1,572
	19	Arms, do.	9,487	423	3,544	290
			306,255	24,356	97,824	20,100
8	20	Ship Building and Furnishing	44,263	1,670	12,145	644
	21	Ceramic Manufactures	31,572	8,232	13,217	6,428
	22	Manufactures of Clay and Stone	35,000	750	10,112	1,102
	23	„ Wood, Bark, &c.	56,546	631	10,023	273
	24	„ Leather	25,998	2,357	5,097	1,601
	25	„ Grain	36,416	393	5,854	21
	26	„ Beer and Spirits	19,425	300	1,351	19
	27	„ Chemical Products	14,798	489	2,554	407
	28	„ Carriages and Harness	30,886	1,071	7,119	466
	29	„ Paper, Books, &c.	39,746	8,617	16,244	5,853
	30	„ Hats, Gloves, Straw Bonnets, &c.	13,953	52,764	3,621	25,490
	31	„ Musical Instruments	4,193	..	886	..
	32	Other Manufactures	11,563	3,588	2,697	1,624
			366,359	80,862	90,920	43,928
9	33	Government Officers	10,493	79	742	30
	34	Revenue „	10,046	..	163	..
	35	Law „	6,926	451	108	7
			27,465	530	1,013	37

TABLE II.—(*Continued.*)

Order	Sub Order		Age 20 years and upwards.		Age under 20 years.	
			Males.	Females.	Males.	Females.
10	36	Army and Militia	79,077	..	11,926	..
	37	Navy and Dockyard Service	46,132	..	8,802	..
			125,209	..	20,730	..
11	38	Construction of Railways, &c.	33,419	..	3,130	..
	39	Occupations (primary) insufficiently defined	15,162	..	4,677	..
			48,581	..	7,807	..
12	40	Dealing, working in Dress	323,923	609,486	67,577	111,979
13	41	Dealing, working in Food, Drinks, &c.	311,569	168,875	54,084	10,405
14	42	Builders, &c., engaged about Houses	413,097	25,430	70,298	149
15	43	Dealing in Household Furniture	91,931	13,200	22,897	3,920
	44	„ Fuel	23,129	2,786	2,941	1,898
	45	„ Artificial Lights	11,756	168	1,374	51
	46	„ Books, Music, &c.	17,301	3,562	3,680	730
	47	„ Drugs	12,767	538	3,407	81
	48	„ Sundry articles	10,778	590	2,162	250
	49	Auctioneers, Pawnbrokers	6,575	647	1,693	111
	50	Hucksters, General Dealers	34,178	24,456	3,266	1,859
			208,415	45,947	41,420	8,900
16	51	Working, maintaining Railways	52,427	145	7,417	12
	52	Working River and Canal traffic	29,425	218	6,128	46
	53	Working Road traffic	134,169	2,481	19,552	89
	54	Wheelwrights and Blacksmiths	110,292	385	27,465	10
	55	Messengers, Postmen	46,747	2,167	44,702	205
	56	Warehousemen	15,967	2,582	4,128	1,739
			389,027	7,978	109,392	2,801
17	57	Domestic Servants	89,417	587,268	31,774	376,897
	58	Others performing occasional services	19,275	93,394	3,627	1,653
			108,692	680,662	35,401	378,550
18	59	Engaged in tuition	25,108	67,495	7,691	15,635
	60	Legal profession	26,958	18	6,116	3
	61	Medical do.	24,551	145	2,192	..
	62	Clerical do.	32,906	2,046	437	255
	63	Other professional persons	22,923	3,123	2,845	692
			132,446	72,827	19,281	16,575
19	64	Local Government and Police	33,855	3,883	449	84
20	65	Occupations (secondary) insufficiently defined	1,501	3,027	2,049	1,493
—	a	Occupations indefinitely stated	274,331	5,256	53,030	3,504
	b	„ domestic	..	2,898,882	..	20,356
	c	Without occupation, independent	22,539	86,641	331	788
	d	„ „ dependent	13,408	251,490	3,250,873	3,628,044
	e	No return as to occupation	63,907	138,216	6,969	15,686
			374,185	3,380,485	3,311,193	3,668,368

TABLE III.—OCCUPATIONS, ENGLAND AND WALES.

IN DETAIL.

Sub-Order		Age 20 Years and upwards.		Age under 20 Years.	
		Males.	Females.	Males.	Females.
1	**Agriculture and Grazing and Breeding Animals—**				
	Land proprietor	15,066	15,550	65	85
	Farmer, grazier	226.019	22,751	938	27
	Farmer's grazier's wife	..	163,498	..	267
	Do. do. son, grandson, brother, nephew	60,044	55,137	32,277	28,603
	Farm bailiff	15,556	..	142	..
	Agricultural labourer (out-door)	725,318	33,762	188,983	10,202
	Shepherd (out-door)	20,559	..	4,900	..
	Farm servant (in-door)	63,442	25,843	94,959	20,718
	Land surveyor, land, estate agent	4,191	..	511	..
	Others connected with agriculture	3,450	36	556	8
	Horse proprietor, breeder, dealer	1,238	..	46	..
	Horse breaker	1,396	..	92	..
		1,136,379	316,577	323,468	60,000
2	**Arboriculture—**				
	Woodman	7,914	..	993	..
	Others connected with arboriculture	8	7	2	2
		7,922	7	995	2
3	**Horticulture—**				
	Gardener (not domestic servant)	68,852	1,607	7,908	166
	Nurseryman	2,451	..	387	..
	Others connected with Horticulture	69	67	8	17
		71,372	1,674	8,303	183
4	**Fishing—**				
	Fisherman	13,967	162	3,025	73
	Net maker	..	945	..	508
		13,967	1,107	3,025	581
5	**Mining—**				
	Iron Miner	15,974	..	4,652	..
	Lead do.	14,233	..	4,319	..
	Tin do.	9,234	..	5,060	..
	Copper do.	11,938	..	5,789	..
	Coal do.	173,067	..	73,546	..
	Others connected with Mines	10,210	87	2,310	7
		234,656	87	95,696	7
6	**Quarrying—**				
	Stone quarrier	18,342	..	2,607	..
	Slate do	7,025	..	2,335	..
	Limestone quarrier, burner	4,781	..	726	..
	Salt manufacture	1,756	..	260	..
	Others working in salt	..	85	..	38
	Do. do. stone, clay	5,192	483	865	268
		36,996	568	6,883	306
7	**Mercantile—**				
	Merchant	12,571	..	373	..
	Banker	1,339	..	24	..
	Broker	2,673	..	211	..
	Stock, share dealer, broker	1,694	..	58	..
	Ship agent	2,310	..	253	..

TABLE III.—*Continued.*

Sub-Order.		Age 20 Years and upwards.		Age under 20 Years.	
		Males.	Females.	Males.	Females.
7	Mercantile—				
	Agent, factor	8,478	..	217	..
	Salesman	1,107	..	140	..
	Accountant	5,765	..	474	..
	Commercial clerk	39,421	..	16,236	..
	Do. traveller	10,410	..	344	..
	Insurance, benefit society agent, officer	2,384	..	332	..
	Others engaged in mercantile pursuits	1,647	3,348	20	181
		89,729	3,348	18,682	181
8	Dealers in Staple Articles—				
	Manchester warehouseman	2,303	..	963	..
	Iron merchant, agent	734	..	38	..
	Hardware man, dealer	954	..	126	..
	Coal, colliery agent, factor	1,875	..	51	..
	Corn merchant	8,445	..	757	..
	Timber merchant	5,566	..	570	..
	Wool stapler	2,045	..	232	..
	Fellmonger	1,616	..	292	..
	Skinner	1,409	..	276	..
	Cattle, sheep dealer, salesman	4,689	..	206	..
	Pig merchant, dealer	1,265	..	63	..
	Salt agent, merchant, dealer	353	..	35	..
		31,274		3,579	..
9	Sea Navigation—				
	Shipowner	1,551	242	17	4
	Seaman	78,028	..	16,637	..
	Pilot	2,794	..	186	..
	Boatman on seas	1,149	..	126	..
	Others connected with seas and rivers	6,442	180	578	17
		89,964	422	17,544	21
10	Harbour and Dock Service—				
	Harbour, dock service, dock labourer	29,572	..	2,878	..
	Wharfinger	1,319	..	128	..
		30,891		3,006	..
11	Cotton and Linen Manufactures—				
	Cotton manufacture	125,343	147,895	72,229	111,179
	Fustian do.	1,904	1,494	819	1,291
	Flax, linen do.	7,159	6,576	2,132	6,183
	Calico, cotton printer	7,934	846	2,762	1,014
	Do. dyer	3,443	45	1,274	10
	Thread manufacture	214	342	159	371
	Muslin do.	168	39	25	21
	Muslin embroiderer	..	15	..	2
	Tape manufacturer, dealer	..	519	..	365
	Others working and dealing in cotton and flax	3,536	834	662	223
		149,701	158,605	80,062	120,659

TABLÆ III.—*Continued.*

Sub-Order.		Age 20 Years and upwards.		Age under 20 Years.	
		Males.	Females.	Males.	Females.
12	**Woollen and Worsted Manufacture—**				
	Woollen cloth manufacture	61,095	30,370	20,109	18,460
	Worsted do.	18,177	26,045	12,207	22,813
	Stuff do.	1,956	1,159	497	343
	Carpet and rug do.	4,802	845	1,219	599
	Wool, woollen dyer	1,533	..	254	..
	Flannel manufacture	639	288	85	118
	Blanket do.	1,350	..	208	..
	Berlin wool dealer, worker	..	788	..	180
	Fuller	826	..	175	..
	Others working and dealing in wool and worsted	3,150	1,258	758	467
		93,528	60,753	35,512	42,980
13	**Silk Manufacture—**				
	Silk manufacture	27,042	44,417	8,073	22,146
	Ribbon do.	3,476	4,117	901	847
	Fancy goods do.	..	196	..	231
	Silk dyer, printer	2,191	..	427	..
	Others working and dealing in silk	1,365	617	664	297
		34,074	49,347	10,065	23,521
14	**Hosiery, Lace, &c., Manufacture—**				
	Hose, stocking manufacture	20,192	15,562	4,224	5,901
	Lace do.	6,008	30,836	2,188	14,271
	Trimming maker	..	938	..	483
	Embroiderer	..	1,524	..	674
	Dyer, scourer, calenderer	5,702	717	1,206	151
	Weaver (not otherwise defined)	1,943	2,690	263	957
	Others working and dealing in mixed fabrics	3,165	3,804	1,097	2,606
	Shawl manufacture	92	151	18	37
	Packer and presser	1,755	..	332	..
		39,541	56,142	9,428	25,170
15	**Iron and Steel Manufactures—**				
	Iron manufacture	92,620	1,089	30,810	1,252
	Nail do.	11,616	6,694	3,753	4,067
	Anchorsmith	3,000	343	964	265
	Boiler maker	10,284	..	2,732	..
	File do.	5,536	422	2,110	245
	Cutler	4,381	168	1,205	87
	Needle manufacture	1,644	1,192	690	550
	Grinder (branch undefined)	952	..	295	..
	Scissors maker	930	202	240	138
	Saw smith, maker	1,574	..	315	..
	Blade maker, forger	1,559	..	439	..
	Knife do.	4,024	..	1,326	..
	Razor do.	849	..	210	..
	Steel manufacturer, worker	2,326	..	860	..
	Screw cutter, maker	..	571	..	675
	Others working and dealing in iron and steel	8,225	430	3,392	353
		149,520	11,411	49,341	7,632

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
16	**Tin, Lead, Copper, Zinc, and Mixed Metal Manufactures—**				
	Brassfounder	11,044	..	4,941	..
	Locksmith, Bellhanger	4,253	..	1,219	..
	Button maker	2,056	2,179	763	1,646
	Wire do.	2,453	..	689	..
	Wire worker, weaver	1,696	..	591	..
	Copper manufacture	3,032	..	795	..
	Zinc do.	579	3	164	14
	Lead do.	2,006	..	789	..
	Type founder	634	..	229	..
	Tin manufacture	1,735	1,554	1,531	2,432
	Tin plate worker	5,692	..	1,596	..
	Gasfitter	4,287	..	1,161	..
	Pin manufacture	..	216	..	191
	Steel pen maker	..	715	..	563
	Lacquerer	..	270	..	214
	Others working and dealing in mixed metals	4,976	1,811	1,883	1,263
	Do. in lead and antimony	323	475	44	495
	Do. in tin and quicksilver	124	254	46	204
	Do. in copper	33	1,529	10	2,452
	Others connected with designs, medals, &c.	1,062	37	360	11
		45,977	9,043	17,011	9,475
17	**Engine, machine, and tool manufactures—**				
	Engine and machine maker	48,296	..	12,511	..
	Tool maker	4,648	..	1,199	..
	Spindle do.	1,533	..	1,031	..
	Weighing machine, scale, measure maker	1,185	..	326	..
	Others making and dealing in tools and machines	10,827	1,248	3,695	1,196
	Do. in implements	1,098	92	223	5
		67,587	1,340	18,985	1,131
18	**Gold and Silver Workers, and makers of Watches and Philosophical Instruments—**				
	Goldsmith, silversmith	10,629	998	3,564	702
	Plater	1,447	..	457	..
	Watch, Clock maker, manufacturer	16,701	406	3,520	130
	Optician, spectacle maker	1,637	..	376	..
	Others working and dealing in gold, silver and precious stones	1,819	606	684	668
	Do. connected with watches and philosophical Instruments	933	127	220	72
	Surgical instrument maker	528	..	122	..
		33,684	2,139	8,943	1,572
19	**Manufacture of Arms—**				
	Gunsmith	8,299	..	3,263	..
	Others making and dealing in arms	1,188	423	281	290
		9,487	423	3,544	290

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
20	**Ship Building and Furnishing—**				
	Shipwright, shipbuilder	25,859	..	5,619	..
	Block, oar, mast maker	1,518	..	434	..
	Sailmaker	3,065	..	1,069	..
	Others connected with shipbuilding	2,499	64	336	11
	Ropemaker	7,965	1,225	3,797	499
	Sailcloth manufacture	416	198	74	70
	Canvas maker, dealer	408	183	44	64
	Boat, barge builder	2,733	..	782	..
		44,263	1,670	12,145	644
21	**Ceramic Manufactures—**				
	Earthenware manufacture	17,676	6,387	8,462	5,547
	Glass do.	9,855	737	3,954	500
	Looking glass makers and others	1,025	347	195	100
	Tobacco pipe maker	2,325	640	462	210
	Others working and dealing in Earthenware	358	23	75	14
	Do. in glass	333	98	69	57
		31,572	8,232	13,217	6,428
22	**Manufactures of Clay and Stone—**				
	Brickmaker	28,996	750	8,772	1,102
	Clay labourer	1,952	..	713	..
	Stone cutter, &c.	4,052	..	627	..
		35,000	750	10,112	1,102
23	**Manufactures of Wood, Bark, &c.—**				
	Sawyer	28,854	..	2,781	..
	Lath maker	1,453	..	397	..
	Cooper	14,638	..	3,082	..
	Hoop maker, bender	987	..	268	..
	Cork cutter	1,664	..	513	..
	Wood carver	1,496	..	396	..
	Turner	5,843	..	1,785	..
	Others working and dealing in wood	3,630	540	863	248
	Do. do. in bark	51	91	8	25
		58,546	631	10,023	273
24	**Manufactures of Leather, Ivory, Horn, Bone and Hair—**				
	Currier	10,699	233	2,147	37
	Tanner	7,254	..	1,100	..
	Others working and dealing in skins, &c.	2,952	684	652	442
	Comb maker	1,137	121	142	78
	Others working and dealing in grease, bones, &c.	3,162	307	666	129
	Hair, bristle manufacture	734	985	375	908
	Others working and dealing in hair	67	27	15	7
		25,998	2,357	5,097	1,601
25	**Manufactures of Grain—**				
	Miller	26,446	393	5,243	21
	Maltster	9,970	..	611	..
		39,416	393	5,854	21

TABLE III.—*Continued.*

Sub-Order.		Age 20 Years and upwards.		Age under 20 Years.	
		Males.	Females.	Males.	Females.
26	Manufactures of Beer and Spirits—				
	Brewer	18,728	300	1,305	19
	Distiller, Rectifier	697	..	46	..
		19,425	300	1,351	19
27	Manufactures of Chemical Products—				
	Manufacturing chemist, &c. (including labourers)	6,545	..	960	..
	Sugar refiner	2,606	..	184	..
	Soap boiler	1,366	..	246	..
	Dye, colour manufacture	924	..	186	..
	Oil miller, refiner	1,286	..	427	..
	Others working and dealing in Chemicals	2,071	469	551	407
		14,798	469	2,554	407
28	Manufacture of Carriages and Harness—				
	Coach maker	15,279	..	3,981	..
	Whip maker	836	92	223	34
	Saddler, harness manufacturer	13,761	769	3,289	410
	Others connected with carriages	1,017	210	226	22
		30,893	1,071	7,119	466
29	Manufacture of Paper, Books, &c.—				
	Paper manufacturer	5,667	3,583	2,079	2,029
	Printer	20,450	259	9,721	160
	Bookbinder	5,050	3,164	1,506	2,200
	Engraver	3,717	..	950	..
	Lithographer, lithographic printer	2,218	..	689	..
	Envelope maker	..	463	..	307
	Paper box maker	..	507	..	556
	Paper stainer	968	248	568	151
	Others working and dealing in paper	1,676	394	711	360
		39,746	8,617	16,244	5,853
30	Manufacture of Hats, Gloves, &c.—				
	Hatter	9,515	2,262	1,215	822
	Glover (not otherwise described) and leather glover	2,461	15,649	568	6,622
	Glove knitter	..	260	..	176
	Straw plait manufacture	567	17,468	1,561	10,271
	Straw hat, bonnet maker	1,410	11,847	277	4,642
	Artificial flower maker	..	2,479	..	1,993
	Knitter (worsted)	..	1,611	..	414
	Fancy worker	..	1,188	..	550
		13,953	52,764	3,621	25,490
31	Manufacture of Musical Instruments—				
	Musical instrument maker, dealer	4,193	..	886	..
		4,193	..	886	..
32	Manufacture of Other Articles—				
	Hemp manufacture	..	137	..	44
	Floorcloth, oilcloth manufacture, & others working and dealing in hemp	2,364	1,209	704	349

TABLE III.—*Continued.*

Sub-Order.		Age 20 Years and upwards.		Age under 20 Years.	
		Males.	Females.	Males.	Females.
32	**Manufacture of Other Articles—**				
	Felt manufacture	288	..	74	..
	Japanner	1,187	743	250	455
	Toy maker, dealer	1,022	1,123	149	280
	Ginger beer, soda water, &c. manufacture	1,101	..	176	..
	Tobacco, cigar, snuff manufacture	2,989	376	1,039	496
	Coke burner	2,678	..	305	..
		11,563	3 588	2,697	1,694
33	**Government Officers and Employés—**				
	The Queen	..	1	..	..
	Royal Family	2	2	4	4
	Peers not otherwise returned	230	..	2	..
	Members of the House of Commons	252	..	..	..
	H.M. Court and Household (excluding domestics)	89	6	..	..
	Other Government officers, &c.	26	70	..	26
	Civil servants not in Post Office or Revenue Departments	6,548	..	448	..
	Messengers and workmen employed by Government	2,145	..	284	..
	East India and Colonial Service	1,201	..	4	..
		10,493	79	742	30
34	**Revenue Officers—**				
	Customs	5,549	..	89	..
	Inland Revenue	4,497	..	74	..
		10,046	..	163	..
35	**Law Officers—**				
	Magistrate	2,526	..	..	..
	Officers of Law Court	1,809	..	87	..
	Prison officer	2,591	451	21	7
		6,926	451	108	7
36	**Army and Militia—**				
	Army officer	5,455	..	852	..
	Do. half-pay officer	3,404	..	2	..
	Soldier	56,099	..	10,653	..
	Chelsea pensioner	11,326	..	16	..
	Militia	2,405	..	361	..
	Others connected with the Army	388	..	44	..
		79,077	..	11,928	..
37	**Navy and Dockyard Service—**				
	Navy officer	2,478	..	490	..
	Do. half-pay officer	1,537	..	1	..
	Seaman R.N.	12,539	..	5,199	..
	Greenwich pensioner	6,062	..	13	..
	Marine	7,127	..	1,604	..
	Coast Guard and others connected with the Navy	3,899	..	30	..
	Artificers and Labourers in H.M. Dockyards	12,470	..	1,525	..
		46,132	..	8,802	..

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
38	Construction of Railways and other great works—				
	Railway labourer	25,140	..	2,629	..
	Excavator, navvy	8,279	..	501	..
		33,419	..	3,130	..
39	Occupations insufficiently defined—				
	Mechanic, Manufacturer	8,182	..	3,439	..
	Millwright	6,980	..	1,238	..
		15,162	..	4,677	..
40	Dealing in Dress—				
	Draper	33,684	8,849	11,976	3,144
	Silk mercer	816	..	166	..
	Hosier, haberdasher	3,504	1,777	823	349
	Clothier	1,145	95	118	19
	Tailor	94,212	21,627	14,792	5,759
	Milliner	..	223,421	..	62,877
	Seamstress	..	65,224	..	10,791
	Stay maker	..	9,057	..	1,541
	Cap do.	..	3,330	..	1,497
	Bonnet do.	..	4,394	..	1,362
	Furrier	912	1,228	146	433
	Clothes dealer, salesman, outfitter	2,845	1,795	355	193
	Shoemaker	175,536	29,047	35,687	10,311
	Do. wife	..	79,068	..	561
	Patten, clog maker	3,531	..	1,449	..
	Umbrella, parasol, stick maker	2,077	1,733	534	854
	Washerwoman, mangler, laundry keeper	..	155,669	..	10,773
	Others working & dealing in dress	5,661	3,172	1,531	1,495
		323,923	609,486	67,577	111,979
41	Dealing in Food, Drinks, &c., and providing Lodgings—				
	Butcher	53,206	2,258	12,387	281
	Do. wife	..	25,144	..	153
	Baker	37,995	5,602	9,954	589
	Flour dealer	1,422	377	110	12
	Cowkeeper, milkseller	11,659	3,513	2,182	340
	Cheesemonger	3,243	294	640	24
	Provision curer, dealer	6,908	3,358	574	152
	Poulterer	1,942	554	276	22
	Fishmonger	8,110	1,849	1,042	304
	Greengrocer	11,390	5,050	1,259	346
	Confectioner	6,918	5,354	1,480	774
	Innkeeper	21,163	6,732	170	249
	Do. wife	..	16,105	..	22
	Inn, clubhouse, &c. servant	17,074	9,598	7,379	4,547
	Publican, licensed victualler	31,184	6,280	218	264
	Beerseller	11,679	3,903	72	113
	Publican's, beerseller's wife	..	29,690	..	53
	Wine and spirit merchant	6,730	344	738	8
	Cellarman	1,542	..	226	..
	Grocer	60,025	18,327	13,714	1,417
	Tobacconist	3,150	1,176	499	119
	Cook (not domestic servant)	1,138	..	110	..
	Potato merchant, dealer	1,245	..	100	..

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
41	Dealing in Food, Drinks, &c., and providing Lodgings—				
	Fruit, flower hawker, vendor	682	1,461	165	258
	Coffee house, eating house keeper	2,503	1,316	42	94
	Lodging house keeper	3,429	17,165	14	92
	Do. wife	..	2,027	..	3
	Others working and dealing in animal food	550	115	53	8
	Do. in vegetable food	393	578	28	54
	Do. in drinks and stimulants	2,971	679	316	127
	Do. in water	588	26	53	..
	Seed, meal merchant, dealer	1,943	..	210	..
	Waterworks service	1,425	..	81	..
		311,569	166,875	54,084	10,405
42	Engaged in House Construction—				
	House proprietor	11,377	24,550	25	80
	Architect	3,142	..	698	..
	Surveyor	1,617	..	226	..
	Builder	14,373	..	1,285	..
	Carpenter, joiner	150,780	..	27,038	..
	Bricklayer	68,422	..	11,001	..
	Mason, paviour	71,789	..	12,614	..
	Slater	4,552	..	710	..
	Plasterer	15,454	..	3,078	..
	Painter, Plumber, Glazier	61,900	424	12,272	23
	*Thatcher	4,681	..	674	..
	Paperhanger	1,895	..	405	..
	House agent, rent collector	1,743	..	81	..
	Others engaged in houses and buildings	1,372	456	191	46
		413,097	25,430	70,298	149
43	Dealing in Household Furniture and Utensils—				
	Cabinet maker, upholsterer	28,475	5,232	6,563	767
	Carver, gilder	4,020	..	1,315	..
	Picture frame maker	1,021	..	226	..
	Chair maker	5,378	702	1,446	434
	Box do.	1,049	1,058	399	794
	Bedstead, mattress, bed tick maker	1,241	..	376	..
	Furniture broker, dealer	3,101	699	162	35
	Ironmonger	7,177	396	1,989	45
	Whitesmith	7,748	..	2,104	..
	Tinman	5,754	..	1,966	..
	Brazier	1,779	..	440	..
	Coppersmith	1,474	..	408	..
	Earthenware and glass dealer	3,279	1,208	344	134
	Brush and broom maker	6,640	1,771	1,880	887
	Mat maker, seller	970	264	328	118
	French polisher	3,637	826	935	368
	Basket maker	6,602	601	1,513	179
	Others connected with carving and figures	1,853	94	474	34
	Do. working and dealing in cane, rush, &c.	733	349	129	125
		91,931	13,200	22,897	3,920

*No doubt Thatchers are very much engaged thatching stacks of farm produce, and if that be their chief employment they would be better placed in Class I.

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
44	**Dealing in Fuel—**				
	Coal merchant, dealer	10,710	693	843	21
	Coal heaver, coal labourer	11,649	1,935	1,998	1,828
	Others working and dealing in coal	770	159	100	49
		23,129	2,786	2,941	1,898
45	**Dealing in, Providing Lights—**				
	Tallow chandler	3,690	168	777	51
	Gasworks service	8,066	..	597	..
		11,756	168	1,374	51
46	**Dealing in Books, Music, &c.—**				
	Publisher, bookseller	6,190	855	1,012	97
	Stationer	4,126	1,432	1,089	330
	Newspaper agent, vendor, &c.	1,844	..	561	..
	Others connected with books	551	533	98	42
	Do. prints and pictures	2,511	294	457	141
	Do. musical instruments	1,099	192	187	29
	Do. games and sports	980	256	276	101
		17,301	3,562	3,680	730
47	**Dealing in Drugs, &c.—**				
	Druggist	12,638	365	3,388	23
	Others making and dealing in surgical instruments	129	173	19	58
		12,767	538	3,407	81
48	**Dealing in Sundry Articles—**				
	Oil and colourman	1,976	103	350	9
	India rubber manufacturer, dealer	523	161	194	116
	Waterproof article maker, dealer	202	49	26	17
	Others working and dealing in gums and resins	637	29	145	6
	Wood dealer	2,271	248	721	102
	Fence and hurdle maker	816	..	153	..
	Hay and straw dealer	1,604	..	112	..
	Undertaker	1,068	..	66	..
	Marble mason	1,681	..	371	..
		10,778	590	2,162	250
49	**Auctioneers and Pawnbrokers—**				
	Auctioneer	3,334	..	208	..
	Pawnbroker	3,241	647	1,485	111
		6,575	647	1,693	111
50	**General Dealers, and Dealers in Rubbish and Refuse—**				
	Shopkeeper	4,390	9,727	166	297
	,, wife	..	2,030	..	2
	Hawker, pedlar	12,371	7,255	1,333	833
	General dealer, huckster, costermonger	11,388	3,065	1,160	266
	Other general dealers	336	1,473	57	174
	Marine store dealer	3,422	..	234	..
	Rag gatherer, dealer	2,001	906	268	287
	Dust collector, sifter, &c.	270	..	48	..
		34,178	24,456	3,266	1,859

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
51	**Working, maintaining Railways—**				
	Railway engine driver, stoker	9,342	..	1,072	..
	" officer, clerk, stationmaster	11,146	..	3,401	..
	" servant, porter	24,094	..	2,633	..
	" police	1,419	..	25	..
	Platelayer	6,176	..	283	..
	Others connected with railways	250	145	3	12
		52,427	145	7,417	12
52	**Managing River and Canal Traffic—**				
	Canal service	3,508	..	567	..
	Boat and bargeman, lighterman	25,661	164	5,560	43
	Others connected with canals and rivers	166	54	1	3
		29,425	218	6,128	46
53	**Managing and Working Road Traffic—**				
	Coach, cab, omnibus owner	3,201	148	25	..
	Coachman (not domestic servant), guard, postboy	16,693	..	558	..
	Carman, carrier, carter, drayman	56,792	563	10,278	18
	Cabman, flyman	8,508	..	447	..
	Others connected with conveyance	778	73	73	6
	Livery stable keeper	867	..	25	..
	Groom, horse keeper, jockey	29,832	..	6,763	..
	Others engaged about animals	1,701	121	197	3
	Road contractor, inspector, &c.	999	..	23	..
	Road labourer	8,896	..	577	..
	Toll collector	3,125	1,576	138	62
	Drover	2,677	..	448	..
		134,169	2,481	19,552	89
54	**Wheelwrights and Blacksmiths—**				
	Wheelwright	24,635	..	5,352	..
	Blacksmith	85,657	385	22,113	10
		110,292	385	27,165	10
55	**Messengers, Postmen—**				
	Post-office	11,325	1,685	984	137
	Messenger, porter (not Government)	32,318	332	42,274	705
	Telegraph service	1,044	150	1,355	63
	Others connected with messages	2,060	..	89	..
		46,747	2,167	44,702	905
56	**Warehousemen—**				
	Engaged in warehousing	13,596	2,550	3,924	1,728
	Others connected with storage	2,371	32	204	11
		15,967	2,582	4,128	1,739
57	**Domestic Servants—**				
	Domestic servant (general)	40,793	345,336	21,363	298,935
	Coachman	11,703	..	194	..
	Groom	13,218	..	8,178	..

TABLE III.—*Continued.*

Sub-Order.		Age 20 Years and upwards.		Age under 20 Years.	
		Males.	Females.	Males.	Females.
57	**Domestic Servants—**				
	Gardener	13,129	..	1,492	..
	Housekeeper	..	64,940	..	1,466
	Cook	..	73,354	..	4,468
	Housemaid	..	66,625	..	35,837
	Nurse	..	32,274	..	35,511
	Laundry maid	..	3,390	..	650
	*Gamekeeper	9,402	..	446	..
	Others engaged in attendance	1,242	1,349	111	30
		89,471	567,268	31,774	376,897
58	**Others performing occasional services—**				
	Barber, hairdresser	9,119	..	1,533	..
	Chimney sweeper	4,341	..	1,503	..
	Vermin destroyer	1,622	..	136	..
	Scavenger, nightman	1,286	..	88	..
	Charwoman	..	63,900	..	1,373
	Nurse (not domestic servant)	..	24,715	..	106
	Midwife	..	1,913	..	..
	Hospital, asylum, &c., attendant	1,593	2,698	58	99
	†Others connected with exhibitions, &c.	1,314	168	309	75
		19,275	93,394	3,627	1,653
59	**Engaged in tuition—**				
	Schoolmaster	17,591	35,412	879	2,257
	Music master	2,318	2,594	114	509
	Professor, teacher of languages	1,479	870	31	112
	„ „ mathematics	455	..	11	..
	General teacher	2,071	6,791	6,512	9,499
	Teacher of dancing, gymnastics	412	..	19	..
	Governess	..	21,568	..	3,202
	Others engaged in teaching	702	260	25	46
		25,108	67,495	7,691	15,625
60	**Legal profession—**				
	Barrister	3,071	..	..	..
	Solicitor	11,386	..	..	..
	Law clerk	10,999	..	5,606	..
	„ student	487	..	219	..
	„ stationer	884	..	288	..
	Others connected with the law	131	18	3	3
		26,958	18	6,116	3

* Not strictly speaking Domestic Servants, but they would probably be out of place in any other sub-order—*ex. gr.*, if placed with Agriculturists as being breeders of Game.

† Including "billiard table keeper, marker," "show keeper, servant," "cricketer," "equestrian," and others: not very satisfactorily placed here, but not much superior in dignity to the rat-catchers.

TABLE III.—*Continued.*

Sub-Order.		Age 20 years and upwards.		Age under 20 years.	
		Males.	Females.	Males.	Females.
61	**Medical profession—**				
	Physician	2,385	..	..	..
	Surgeon	12,030	..	..	..
	Farrier, veterinary surgeon	6,132	..	642	..
	Medical student, assistant	2,276	..	1,290	..
	Dentist	1,331	..	236	..
	Others connected with medicine	397	145	24	..
		24,551	145	2,192	..
62	**Clerical profession—**				
	Clergyman	19,195	..	..	..
	Protestant minister	7,840	..	..	..
	Roman Catholic priest	1,216	..	..	..
	Other religious teachers and church officers	4,655	2,046	437	255
		32,906	2,046	437	255
63	**Other professional persons and artists—**				
	Author, editor, writer	1,480	..	48	..
	Others connected with literature	1,771	180	96	5
	Civil engineer	2,899	..	430	..
	Pattern designer	1,099	..	241	..
	Other scientific persons	680	39	44	3
	Sculptor	546	..	66	..
	Painter (artist)	4,333	723	304	130
	Musician (not teacher)	6,617	1,305	1,231	313
	Actor	1,238	702	73	189
	Photographic artist	2,092	..	274	..
	Others connected with fine arts	34	174	2	52
	„ „ music	134	..	36	..
		22,923	3,123	2,845	692
64	**Local Government and Police—**				
	Parish clerk	2,122	..	18	..
	Union, district, and parish officer	6,009	1,487	124	20
	Officer of local board	351	..	10	..
	Other county and local officers	2,031	18	87	..
	Police	21,811	..	127	..
	Pew opener	..	747	..	5
	Officer of charitable institution	..	954	..	31
	Others engaged in boarding and lodging in lunatic asylums, &c.	1,531	677	83	28
		33,855	3,883	449	84
65	**Occupations (secondary) insufficiently defined—**				
	Shopman	1,501	3,027	2,049	1,493

TABLE III.—*Continued.*

	Age 20 years and upwards.		Age under 20 years.	
	Males.	Females.	Males.	Females.
UNCLASSIFIED.				
(*a*) Occupation indefinitely stated—				
Labourer (branch undefined)	256,939	2,658	47,605	681
Apprentice	145	..	2,439	..
Other indefinite occupations	15,247	2,598	2,976	2,823
	274,331	5,256	53,020	3,504
(*b*) Occupation domestic—				
Wife	..	2,629,809	..	20,387
Widow	..	269,073	..	69
	..	2,898,882	..	20,336
(*c*) Without occupation, independent—				
Gentleman, independent	12,156	27,034	251	386
Annuitant	10,383	59,607	80	402
	22,539	86,641	331	788
(*d*) Without occupation, dependent—				
Dependent on relatives	1,120	2,943	28	14
Son, grandson, brother, nephew ..	8,426	246,874	1,701,969	2,032,383
Scholar under tuition	3,862	1,673	1,548,876	1,595,637
	13,408	251,490	3,250,873	3,628,034
(*e*) No return as to occupation—				
Persons living on alms	1,160	9,646	9	90
Paupers	8,050	32,087	1,898	1,994
Others supported from voluntary sources and rates	3,688	1,295	28	43
Lunatics	1,927	5,966	412	336
Prisoners	193	1,112	951	426
Inmates of refuges, &c.	..	270	..	414
Vagrants, beggars, &c.....	609	344	127	85
Gipsies	224	207	158	149
Visitors	2,747	28,396	746	7,989
Others (no return).....	45,309	58,993	2,640	4,160
	63,907	138,216	6,969	15,686

TABLE IV.—PRIMARY AND SECONDARY WORKERS.

Ratios per cent. of Adult Male Inhabitants.

Registration County.	Primary Classes.	Secondary Classes.	Unclassified.			
			Occupation indefinite.	Independent.	Dependent.	No return.
Northumberland	58·2	34·5	5·7	·2	·1	1·2
Durham	62·8	28·8	6·9	·1	·2	1·1
York, East Riding	54·9	39·1	4·6	·3	·2	·9
„ West Riding	65·0	30·8	3·0	·2	·1	·9
Lancaster	59·2	34·1	5·3	·2	·2	1·0
Chester	58·3	34·3	6·1	·3	·2	·9
Stafford	62·4	29·2	6·9	·2	·2	1·0
Warwick	55·6	37·2	5·5	·3	·2	1·2
Worcester	59·0	33·5	5·8	·3	·2	1·2
Salop	61·7	31·4	5·3	·3	·1	1·1
Hereford	59·2	31·9	7·2	·3	·3	1·1
Gloucester	47·6	41·7	8·3	·6	·3	1·5
Somerset	55·3	36·7	5·7	·6	·3	1·4
London	33·5	57·5	6·2	·9	·4	1·5
Surrey (extra Metrop.)	53·6	38·7	4·8	·9	·3	1·5
Kent „ „	60·2	32·7	5·0	·6	·3	1·3
Devon	58·6	34·4	4·8	·6	·1	1·2
England and Wales	56·1	36·8	5·2	·4	·3	1·2

TABLE V.—PRIMARY WORKERS SUBDIVIDED UNDER CLASSES & ORDERS.

Ratios per cent. of Adult Male Inhabitants.

Registration County.	Ord. 1.	Ord. 2.	Ord. 3.	Ord. 4 Ord. 5 C'mercial.		Ord. 6 Ord. 7 Ord. 8 Manufacturing.			Ord. 9 Ord. 10 Govt. S'vice.		Ord. 11.
	Agricul-ture.	Fishing.	Mining.	Com-merce.	Navi-gation.	Textile.	Metallic.	Other.	In. Admi-nistration	Army, Navy, &c.	Occasional & insufficiently defined.
Northumberland	18·8	·9	12·3	2·1	6·3	·4	7·1	8·1	·4	·6	1·3
Durham	10·1	·2	21·2	1·5	8·0	·5	9·1	10·6	·2	·3	1·2
York, East Riding	29·7	·7	·2	3·1	5·9	1·0	3·5	8·2	·7	1·3	·7
„ West Riding	14·4	·0	6·9	1·9	·3	22·4	11·7	5·4	·2	·4	1·3
Lancaster	9·4	·1	5·3	3·7	3·8	20·8	7·3	6·5	·3	·7	1·3
Chester	24·0	·1	3·7	2·8	2·1	13·2	4·4	6·0	·3	·6	1·2
Stafford	13·8	·0	15·3	1·3	·1	9	17·8	12·1	·2	·3	·6
Warwick	17·0	·0	1·3	2·1	·1	4.4	20·8	8·4	·2	·8	·6
Worcester	25·2	·0	3·6	2·1	·1	2·2	15·5	8·7	·3	·5	·8
Salop	40·2	·0	7·9	1·1	·1	·4	4·3	5·2	·3	·4	1·9
Hereford	47·7	·1	·8	1·1	·1	·1	·9	4·6	·3	·5	3·0
Gloucester	25·6	·1	2·5	2·5	2·2	2·4	2·7	7·2	·5	1·1	·6
Somerset	36·7	·1	4·1	1·2	·8	1·6	1·5	6·7	·4	1·1	1·0
London	1·8	·0	.2	5·2	3·6	1·5	5·5	10·8	1·4	3·1	·5
Surrey (extra Metrop.)	27·6	·0	·2	2·3	·1	·5	·8	4·8	·9	15·7	·7
Kent „ „	30·9	·6	·7	1·1	3·2	·2	1·2	6·2	·8	14·2	·9
Devon	31·3	·9	2·7	1·2	3·1	·7	1·3	6·5	·7	9·8	·6
England and Wales	23·2	·3	5·2	2·3	2·3	6·1	5·9	7·0	·5	2·4	·9

TABLE VI.—SECONDARY WORKERS SUBDIVIDED UNDER CLASSES AND ORDERS.

Ratios per cent. of Adult Male Inhabitants.

Registration County.	Ord. 12 Trading. Dress.	Ord. 13 Trading. Food.	Ord. 14 Trading. Houses.	Ord. 15 Trading. Others.	Ord. 16 Inland Conveyance.	Ord. 17 Attendants.	Ord. 18 Professional Men.	Ord. 19 Local Government.	Ord. 20 Insufficiently defined.
Northumberland	6·4	4·9	8·0	3·2	8·2	1·3	2·0	·5	·0
Durham	4·8	4·3	6·6	2·5	7·7	·8	1 7	·4	·0
York (East Riding)	7·2	6·8	7·5	4·8	7·7	1·9	2·6	·6	·0
York (West Riding)	5·6	4·9	7·2	3·3	6·5	1·1	1·7	·4	·0
Lancaster	5·4	5·5	7·6	3·7	8·3	1·1	1·8	·6	·0
Chester	6·1	5·3	7 2	3·0	8·4	1·7	2·1	·5	·0
Stafford	5·6	5·0	5·4	2·8	7·1	1·3	1·5	·4	·0
Warwick	6·4	6·0	7·6	5·1	7·6	1·8	2·1	·6	·0
Worcester	5·3	5·2	7·2	3·5	7·3	2·0	2·4	·6	·0
Salop	5 9	4·6	6·2	2·3	7·1	2·6	2·2	·4	·0
Hereford	5·2	3·8	9·3	2·3	6·0	2·4	2·3	·6	·0
Gloucester	6 9	6·8	9·6	4·5	7·5	2·5	3·2	·8	·0
Somerset	5 9	6·1	9·4	3·5	5·9	2 2	3·0	·7	·0
London	8 7	9·3	10·6	8·7	11·1	3 1	4·7	1·2	·1
Surrey (extra Metrop.) ..	4·0	6 5	9·6	3·0	6·4	5·0	3·4	·8	·0
Kent " " ..	4·5	6·6	7·3	2·8	5·8	2·6	2·3	·7	·0
Devon	6·2	5·2	9·4	3·0	5·5	1·8	2·6	·6	·0
England and Wales	6·3	6·0	7·9	4·0	7·4	2·1	2·5	·7	·0

ON POPULATION STATISTICS.

Part II.

By Thomas A. Welton.

Read 11th March, 1869.

In a previous paper I have shewn that the English people is divisible into two sections, engaged in primary and secondary occupations respectively, the first dependent in the main on the natural or acquired resources of the country, and the latter on the daily wants of the community—one great section of the people being consequently distributed diversely according as agriculture, commerce, manufactures, or mines afford employment—the other with greater regularity, according as the means of the population or their habits encourage its extension. The secondary classes, it was further shewn, are usually numerous in towns, especially such towns as are ancient or well-established markets, or watering places. They are much less numerous in merely manufacturing places, and fewest in rural districts. It may be added that those rural districts which are nearest to great marts are apt to contain lower proportions of the secondary classes than similar districts in more remote situations.

From these facts it was inferred that the boundaries of districts, the population statistics of which are intended to be brought into comparison, should be adjusted with especial reference to the situation of the principal market within them. That market should be at an easy distance from every portion of the district, and should certainly not be placed at one of its extremities, as Birmingham is at the extremity of War-

wickshire. County boundaries being often inappropriate, others must be selected, and it is best that some great market should form the centre of each division.

The next question is as to the approximate radius of the circle to be drawn around the centre which may have been selected.

In the case of London, a circuit of considerable extent must be chosen, in order to embrace not merely the area of its immediate influence as a neighbouring market, but that of its wider power in draining, as it were, the support from other places, and forbidding the existence of a rival city. The nearest great centres are at a distance of above a hundred miles; and allowing to each of these, Bristol, Birmingham, and Norwich, a district proportionately larger than that assigned to London, we have still a radius of about seventy-five miles within which the metropolis is supreme, being only surrounded at a respectful distance by stars of lesser magnitude, such as Oxford, Cambridge, and Ipswich. Places like Brighton and Southampton are not rivals, they are rather appendages of London.

Proceeding empirically in the same manner, various circles may be formed, and the country intervening between such districts will in general be found to be provided with markets, ancient though small, and sufficient for local wants. I append a list of divisions which may be provisionally adopted. (Appendix A.)

It will be seen that these nineteen divisions have some of them what may be termed "double centres." The ninth includes Nottingham, Derby, and Leicester, and the thirteenth comprises Liverpool, Manchester, and Preston, with many other places. It is, however, abundantly clear, that whether the markets which supply a district be few or many matters but little, so long as the boundary of the district is fairly drawn as between those markets and external ones. The

statistical results for the district are in either case legitimate, and conclusions may fairly be drawn from them with respect to the condition, upon the whole, of the inhabitants.

After having settled with sufficient precision the boundary of a district, we have next to notice the density of its population; the magnitude of its towns; the increase of its population in town and country (whether by an excess of births over deaths, or by immigration); the character of its primary industries; the manners of its inhabitants, as indicated by the proportional numbers of the secondary classes; the influence of the primary and secondary industries and of other causes in promoting immigration or emigration; the ages of the people, as affected by births, deaths, and migration, past and present; the ebb and flow of apparent prosperity in past times, as indicated by the record of marriages; the fecundity of those marriages, as shewn by the proportion of births to married women at the childbearing ages; and lastly the varying rates of mortality in town and country at different ages from several causes and in successive periods. I shall proceed to mention some of the circumstances which should be borne in mind in making the necessary calculations.

In the first place, we must avoid comparing the statistics of suburbs with those of towns, or those of country districts with either, except indeed with reference to those features which they not only possess in common, but might reasonably be expected to possess in equal degrees.

In restricting our endeavours to the comparison of town with town, suburb with suburb, or village with village, we are embarrassed by the difficulty which surrounds the application of these terms. The most experienced persons might well find it hard to determine in any given instance where the true town, the centre of commercial and industrial activity, ends, and the suburb, or in other words the surrounding aggregation of homes, begins. And since existing boundaries,

established for reasons quite unconnected with such considerations, (and even if temporarily applicable to philosophical subdivision, not likely to continue so,) will probably remain the sole bases of authentic enumerations, there would be little utility in such an investigation even if it could be successfully carried out.

Villages, again, are very far from easy of definition; for the rural and the manufacturing village differ far more in circumstances than in magnitude, and it can only be arbitrarily settled where, in the long array of populations of different densities and amounts, the village ceases and the town begins.

The definition of a town laid down in this Society's Journal, Vol. IX, viz.: a minimum population of 2,000 persons with a minimum density of 7,111 persons per square mile, was not arrived at without careful consideration of the subject. Yet I felt, even then, that there might be a more satisfactory definition than this, although none occurred to me which were not open to grave objections. A more extended research into the statistics of occupations than I had then made has led me to the conclusion that any place long reputed a town, and inhabited by a population devoted in a great measure to local trade and traffic, may well be deemed such, even though its population should number far less than 2,000 persons, provided it be of a due density; and that although every place exceeding the stated population and of the defined density must for convenience sake be classed as a town, yet a broad distinction should be drawn between such of these as are devoted to primary occupations, and those which are supported by the trade requirements of surrounding places, the latter being more truly towns than the former.

Now that these introductory remarks have been made, it will be convenient to review the several descriptions of population statistics in their order (except occupation statistics, of which perhaps enough has been said), and to commence with

Density of Population.

The density of population in such a district as I have suggested* is fairly comparable with that of any district of similar character. The comparison will not always be equally valid between two provinces or two kingdoms, yet in many cases provinces and kingdoms are so far independent of their neighbours as to be in effect districts (or aggregations of districts) of the right character. The larger the tract of country, the less its statistics are liable to be affected by any irregularities in its outline. But a large river is always a bad boundary. Its natural tendency is to be a centre and highway of intercourse; it ought to be anything rather than the border of a scientific division, unless indeed in the case of estuaries wide enough to constitute a real barrier between the populations on either side. A mountain range, or even a hilly district, sparsely inhabited, forms a good boundary. It is the same with any desert region. Those on either side look rather to the centres of intercourse behind them than to each other for their commercial relations. Railways alone tend to bridge over such tracts, and even railways alter but slowly the habits of mankind; they are quite as often the means of facilitating and increasing the use of old routes, as of causing them to be discarded for new ones.

The French frontier province of Alsace furnishes an instance of a boundary which, for the reason mentioned, is not a convenient one for statistical purposes. The natural course of its traffic is along the valley of the Rhine; its population is still distinguished strikingly from that of the interior of France. But Alsace is too small a part of the French empire to affect materially its statistical averages. And political causes may so far influence the course of Alsatian trade, as to connect Strasbourg more intimately with Paris than with

* See Appendix A.

the opposite bank of the Rhine. Nothing of that kind can happen without turning commerce to some extent out of its proper course; and hence the utility of the German Zolverein, and of all similar expedients for lessening the number of artificial hindrances to trade. But so long as such hindrances exist, they must be treated as scientific facts, and acknowledged as limiting the circles of influence of the markets which lie near them.

On the other hand, the averages of density (and of many other orders of statistical facts) in large kingdoms cover a world of variations not seldom of the greatest consequence. It is important, therefore, to subdivide large countries, with due regard to the situations of their cities, their mountains, roads, and rivers, and to the modes of life of their inhabitants, so that without descending to minute details, the principal variations at least may be brought to light. It is convenient, I think, for this purpose that divisions containing from one to three millions of inhabitants should be chosen; and this will usually be compatible with an approach towards uniformity in extent, which is also desirable.*

The average density of population being known, its distribution is next a matter of curiosity: the number and situation of the towns, and the magnitude of each, and the density of population in the open country, whether in the mountainous parts or in the plains and valleys.

Now, as to the towns, it is never safe to adopt official returns in the gross. With the aid of maps, and of detailed census tables, it may often be ascertained that the true town is greater or less than represented. In this country, many boroughs have extravagantly wide boundaries, and without local knowledge one cannot be certain that such is not more or less the case in foreign countries. It is true, foreign towns

* I have illustrated this subject somewhat in my paper on French Population Statistics in the "Statistical Journal."

are oftener walled than English places, and the chances are rather that some suburb will have grown up outside the recognised boundary, than that an excessively wide area has been included. In either case, topographical knowledge is equally desirable.

It is best to adopt such a boundary as will include every suburb. If, in doing this, we are forced to take in a greater area than we desire, it does not usually matter much, for the surrounding country is commonly but thinly peopled. The inconvenience is therefore confined to the question of density *within* the town, which of course would be materially affected. But in the absence of scientific boundaries constantly varied to suit the growth of towns, no ratios of density can be had in relation to them which possess the smallest value, except indeed those of the central or fully covered portions of their respective areas.

Where the neighbouring parishes are extensive, there is great difficulty in determining, from the general Census Tables, the population of a *small* town. In such cases, it is well that a boundary is fixed by the local officers for the occasion of the Census, as otherwise we could have nothing reliable. Todmorden is stated in the last Census to have 11,797 inhabitants within the limits of the Local Government Act, but the Registrar considers that the town proper would be fairly represented by 1318 inhabited houses and 6458 persons.

Towns, then, must be regarded as accounting for part of the average density of the district in which they stand, and not as having any density of their own worthy of study, except so far as the imperfect data obtainable may be interesting in a social and sanitary point of view. Suburbs should be held to include not much more than the homes of those who work in the town; if there be a separate nucleus near, it constitutes a separate town, to be dealt with apart if possible,

just as Woolwich should be treated as a town by itself, and not an extension of London.

The country densities being more significant, are fit subjects for classification and study; but the treatment of these having been largely illustrated in the Papers on Population in Lancashire and Cheshire, it is not necessary to enter into further explanations in this place.

The limit of subdivision below which the observed variations of density become unworthy of attention, because liable to be affected to too great an extent by accidents and circumstances not permanent in their operation, cannot easily be fixed; however, many localities particularized in the Census fall below such a limit, and the Irish Census is sadly marred by the exceeding smallness of the subdivisions adopted. Rural populations of 1000 persons may on the other hand be considered quite large enough to deserve separate treatment, for it is certain that in districts much exceeding that population, variations of a significant character are apt to be lost sight of, or are inadequately indicated by the mean result. Perhaps a range of 500 to 1500 inhabitants would be the most desirable magnitude for rural districts of the smallest size referred to in statistical investigations.

Actual increase of Population.

This subject is divisible into two parts, viz.:—actual increase as observed at successive Censuses, and natural increase by the excess of Births over Deaths. The former is what I now refer to.

The increase of population within a county or other division may be as inaccurately represented as the absolute density, supposing a town of importance to lie on its boundary line. The densely-peopled nucleus being in one county, and the rapidly-increasing suburbs extending into the next, the first population is represented as tending to increase more slowly, the

other more rapidly, than is actually the case. Not but that the fact is true enough as represented by the tables; it is the inference, for which alone the fact is interesting, that is false.

The same districts which approximately represent the areas of activity of great centres of intercourse, will be found to be free from the objection just stated. And as to the ratios which may properly be deduced from their statistics of increase, those for entire towns (including suburbs) and for country districts are the most important. As to these, enough has perhaps been said in the Papers on Population in Lancashire and Cheshire. But there is still a matter of curiosity as to great cities—on which side is their growth most rapid? and is any part of their fully-built nucleus becoming more or less densely peopled? This is all we can learn, for the rates of increase in particular suburbs are of no statistical value for general purposes.

By way of illustration, such a calculation with reference to London is given in Appendix B.

Casual denizens, such as gipsies, persons assembled at village feasts, and men engaged in railway construction, should be left out of the account in calculating actual increase of population, especially when we are dealing with small districts.

Natural Increase and Migration.

The actual increase being once ascertained, the question next arises, whence has it come?

The tables of Births and Deaths shew with tolerable accuracy the increase arising from natural causes within each Registration District. Many births, however, escape registration, and according to the opinion of Mr. Hammick,* these occur chiefly in London and the large towns, the proportion of Births within the whole kingdom which are omitted in the returns being not less than 5 or 6 per cent.†

* Companion to the British Almanack for 1862.

† I shall endeavour to shew cause for thinking this estimate excessive. See Appendix C.

On comparing the natural increase with that ascertained at the periods of the Censuses, it will generally be found that, whilst large towns and industrial populations increase faster than they would naturally do, by the help of immigration, country places commonly lose a portion of their natural increase through the emigration of part of their inhabitants. The effect of migrations within this country is very great, and appears to have increased much since the development of railways, so that the operation of immigration into England from Ireland, Scotland, and the Continent, and of emigration to those countries and to places more remote, however important it may be, is to a great extent obscured by changes of a more local character.

On the whole, it may safely be assumed that immigrants, whether they come from abroad or from the neighbouring country, are generally of the age and sex required in the places where they gather, either to recruit the numbers of workpeople of the ordinary description employed there, or for the domestic service of the inhabitants.

As the immigrants are in effect the complement necessary to make up that increase to which each centre of employment may be entitled, having regard to the counter attractions existing in other places, their absolute number depends not a little upon the rates of mortality which may prevail in different cities. If, for example, the deaths in Liverpool and Manchester should fall to two-thirds of the births, either the rate of increase must be sensibly accelerated, or a large number of persons who otherwise would come to settle there, will go to other places. It is difficult to foresee which consequence would result in the event supposed; but (all other circumstances remaining unaltered) it is likely that an intermediate and somewhat augmented rate of increase would prevail.

The tables of birthplaces afford considerable aid towards ascertaining the sources from whence the increase of particular

places has been derived. This has been illustrated in the Papers on the Population of Lancashire and Cheshire (*Transactions*, First Series, vol. xi,) and an improvement in the form of the last Census enables me to prove the truth of what was then asserted, viz., that Lancashire has retained among its permanent inhabitants a larger proportion of those born within its bounds than any other county: the proportion actually being in 1861—

Lancashire	90·96	per cent.
Yorkshire	88·03	„
Wales	87·00	„
Cornwall	86·92	„
Durham	84·32	„
Stafford	81·92	„

the other counties retaining less than 80 per cent. of those born within their bounds, and remaining in England.

On the other hand, Lancashire has not added so large a number of strangers to her population, in proportion to its total amount, as several other counties; thus, to 100 inhabitants in

Surrey	52·27	are natives	47·73 are strangers.
Middlesex	59·27	„	40·73 „
Monmouth	62·76	„	37·24 „
Durham	67·58	„	32·42 „
Chester	68·18	„	31·82 „
Kent	68·95	„	31·05 „
Warwick	69·88	„	30·12 „
Southampton	71·03	„	28·97 „
Berks	71·40	„	28·60 „
Worcester	72·42	„	27·58 „
Lancaster	73·63	„	26·37 „

the remaining counties containing lower proportions of strangers.

My calculation was, for the year 1851—

Of 10,000 born in Lancashire, 9,161 were living there.
„ living „ 7,456 „ born „

The true proportions for 1861 are in each case a little lower.

The fact appears to be that Lancashire, having retained

a very large proportion of her native population, has also received a considerable proportion of immigrants compared with the total number of natives, but through the natives remaining (as before remarked) at home, fewer strangers could find room, and they do not bear so large a proportion within the county as in others where population has been more mobile. The metropolis and the counties of Durham and Monmouth have attracted much greater proportions of strangers.

	Natives.		Strangers.	
	Total in England.	Remaining at home.	In the County.	Total Population.
Lancashire	1,966,038	1,788,596	640,844	2,429,440
Cheshire.....	467,383	344,644	160,784	505,428
Durham.....	407,552	343,686	164,980	508,666
Middlesex	1,683,640	1,307,648	898,837	2,206,485
Surrey	615,698	437,317	396,776	831,093
Berks	196,223	125,853	50,403	176,256
Lancashire and Cheshire	2,433,421	2,264,618	670,250	2,934,868
Middlesex and Surrey ...	2,299,338	1,979,944	1,057,634	3,037,578

In comparing such ratios as have been quoted above, it should be borne in mind that the larger the county the more the local movements of population are lost sight of. Lancashire and Cheshire, taken together, shew 670,250 strangers; taken separately, 801,628 strangers; the difference consisting of natives of Cheshire residing in Lancashire, and *vice versa*. If Lancashire were divided into six equal parts, each would be as populous as an ordinary county, and in most of them the proportion of natives resident would be lower, and that of strangers higher, than in Lancashire as a whole.

A mode of estimating the attraction which has been exercised, free from the objection just mentioned, is simply to compare the number of natives of Lancashire (or any other county) with the ascertained population; thus Lancashire and Cheshire shew a nett gain exceeding 500,000, which no adjustment of boundaries can vary; whilst Middlesex and Surrey shew a gain of 738,000, and the other counties for the most part exhibit losses.

Ages, Births, &c.

The ages are largely influenced by the proportionate numbers of births and deaths, and exert a reciprocal influence over those numbers. Thus births depend on the number of women at the childbearing age, as well as upon the tendency to marry, and deaths on the proportions of infants and aged persons, as well as upon the degree of salubrity. But migration is another most powerful disturbing agency, by means of which in some places many of the young adults are removed, leaving a large proportion of aged people and, it may be, a diminished ratio of children; in other places the adult population and the birth-rate are alike largely increased, causing the number of the aged to bear a very small proportion to the whole.

It is matter of observation that the births in rural districts, from which emigration is going on, are not so numerous in proportion to population as in those districts which receive immigrants. Yet in general they exceed the deaths by fully 50 per cent.; and if emigration from such rural districts were stopped, it is probable that, instead of an increased number of marriages and births, the contrary result would ensue, from the impossibility of finding employment for a rapidly increasing population. I think, therefore, that whilst the removal of young people to manufacturing towns tends to increase the birth-rate in such towns, it does not usually tend to decrease the number of births in the places from whence they come.

The differing rates of mortality, acting through long terms of years, help to exaggerate the disproportion between the numbers of the aged in town and country. A stationary country population subject to a low rate of mortality would include a large relative number of old people even if the young did not emigrate,—and on the other hand, the high

mortality in many increasing towns tends to diminish rapidly the small number of aged inhabitants.

Children under ten years of age are not employed to any great extent in town work, and their numbers are not much affected by migrations. If, relatively to the number of children, there are many adults and few aged persons, we have strong evidence of immigration. If there are few adults and many aged persons the contrary inference may be adopted. If there be a low birth-rate, or a heavy infantile mortality, the measure employed is so far faulty as to give an exaggerated idea of the numbers of both adults and aged persons. In the contrary case the ratios would be diminished, and the adults, but still more probably the aged, might appear to be fewer than usual. Sometimes numerous births, attended with a large mortality, leave a population under ten years of age no larger than might have arisen from a much lower proportion of births accompanied by a moderate death rate.

The measure suggested has the merit of shewing very strikingly the inequalities in the component parts of different populations.* It attracts special attention to places where the immigration of young unmarried persons has largely affected population, thus :—

Age.	England and Wales.		Kensington.		London City.	
	Males.	Females.	Males.	Females.	Males.	Females.
0—10	2,527,867	2,516,981	19,724	20,209	3,759	3,929
10—25	2,878,029	2,989,282	20,263	32,960	8,139	7,727
25—40	1,986,257	2,194,227	17,355	29,521	4,643	5,617
40—55	1,396,564	1,474,966	11,819	16,391	3,248	3,942
55 & up.	987,542	1,114,509	6,621	10,487	1,869	2,682

Ratios obtained by treating the whole population as a measure of its parts, shew the irregularities with less distinctness :

* See the Papers on Population of Lancashire and Cheshire, and also Appendix D.

where the numbers at one age are increased, the ratio is increased, but by an equivalent deduction from the other ratios. This measure is in fact not more reliable than the other, and the results obtained by its means are less suggestive.

The returns of ages are to some extent inaccurate. On this subject a paper by Dr. Farr, in the *Statistical Journal*, (vol. xxviii,) is worthy of attentive perusal. He there estimates the error as respects children under five years of age, thus :—

Age.	Enumerated in 1861.	Estimated from Births and Deaths.
0 and under 1	593,721	596,063
1 „ 2	543,040	565,965
2 „ 3	535,981	524,853
3 „ 4	516,296	498,092
4 „ 5	511,744	486,968
Totals	2,700,782	2,671,941

But he does not take into account unregistered births, which he had estimated in the Census Report (page 6) at 36,950 per annum in the ten years 1851-60, nor unregistered deaths, nor migrations. If all these had been considered, probably his estimates would have been somewhat increased. But, as he himself observes, "I have taken as the basis of our cal- "culated table 690,227 (births,) whereas the births registered "in the year ending 31st March, 1861, were only 678,801. "This raises the estimated number in the first year, and is in "itself a set-off against unregistered births." Then his calculation of births not registered seems excessive, for he elsewhere proceeds to shew its basis, thus :—

Excess of registered births over deaths, 1851-61		2,267,518
Excess of population enumerated, 1861 over 1851.....		2,174,327
Emigrants from England and Wales, 1851-61, estimated variously at	640,316 or	568,027
Number of those who must have immigrated, plus the number of unregistered births, (in excess of unregistered deaths,) say.....	547,125 or	474,836
Number of persons born in Scotland, Ireland, and foreign parts, enumerated in 1851.....		761,953
„ in 1861.....		946,172
Increase of Scotch, Irish and foreigners		184,219

Then deducting from 547,125 this increase of strangers (184,219,) the residue, 362,906, is ascribed to non-registration of births.

It has apparently been overlooked by Dr. Farr, that in order to *maintain* a population of 761,953 strangers, a constant immigration must be going on, *equal to the number of deaths* amongst that population. Assuming the deaths among our increasing population of strangers at 15,000 per annum, 150,000 must be at once struck off the supposed number of unregistered births, reducing it to 212,906 in the ten years. And if it be considered that the strangers are two-thirds of them Irish, the mortality suggested will not appear extravagant.

The ages of *foreigners* (being natives of European states) are given, and appear to have been in 1861—

Age.	Males.	Females.
0—20.....	8,544	4,620
20—40.....	31,499	12,801
40—60.....	8,994	4,054
60—80.....	1,679	1,024
80 and upwards	128	91
	50,844	22,590

but the ages of Irish and Scotch inhabitants of this country are not separately shewn.

The number of emigrants of English birth who return to this country annually is not known; but, as observed by Dr. Farr, that number would form a further deduction from the supposed number of births annually unregistered, whilst the number of unregistered deaths (chiefly of infants whose births had not been recorded) would have to be added. These last, however, might as well be omitted from both sides of the account, when it would appear that some 20,000 births at most (say about three per cent.) of children who survived the first few weeks of infancy, were annually unregistered in 18 1-60.

In arguing that the number of births which escape regis-

tration has diminished, Dr. Farr relies simply on the fact that many more births were recorded in 1856-61 than in the preceding five years. This seems inconclusive, except we assume that the number of births could not naturally be augmented so fast as (according to the registers) it appeared to be, during those years. I am reluctant to accept such an assumption, without strong evidence of its truth, and would rather rely on Dr. Farr's bare opinion, supported as it is by the probability that any system of registration would grow more and more efficient with the diffusion of enlightenment.

In the Census Report for 1851 (page xxiv) the Commissioners remark that, taking into consideration the recorded numbers of females at different ages in 1841 and 1851, it is probable that some 35,000 ladies, more or less, who have entered themselves as aged twenty to forty, really belong to the higher ages forty to sixty. But such an estimate can only be regarded as a wide approximation. Dr. Farr, in his paper already referred to, judiciously observes that "by "carrying on the calculation to fifteen or twenty years of age, "if it is based on the registered births, the Census shews "much larger numbers than the calculation leads us to expect; "and these numbers can only be accounted for by immigration "of the Irish chiefly, and by unrecorded births in the earlier "years of registration. I may state, however, that the data "upon which these calculations are based are either difficult "of verification or *conjectural;* and I do not conceive for a "moment that any results deducible from them justify us in "setting aside the counted numbers of the children, whose "enumeration presented little or no difficulty at the Census."

Dr. Farr suggests that many Irish may have returned themselves as English, and that this may have happened in 1861 in a greater number of cases than in 1851. If so, the immigration from that country must necessarily have been so much the greater within the ten years, and the estimate of unregistered births would have to be further diminished.

In abatement of the effect of occupations in disturbing the proportions of population at different ages, it may happen that where the demand for youthful labourers (for some special industry) is greatest, adults enter into other employments in larger proportions than ordinary, thereby accommodating themselves to local circumstances. The inducement of unusually high wages also causes a number of young persons greater than usual, in proportion to the whole, to engage in industrial pursuits.

For example:—

	Under 15.	Males aged 15–20.	20 & upwards.
Lancashire—			
Agricultural labourer	1,084	2,279	27,639
Cotton manufacturer	27,024	28,583	97,883
Son, grandson, &c., not otherwise described	189,693	3,369	759
Scholar (so described)	184,574	3,250	197
Total population	438,100	117,529	634,851
Kent (extra metropolitan)—			
Agricultural labourer	3,705	5,454	33,168
Cotton manufacturer	...	...	10
Son, grandson, &c., not otherwise described	45,026	1,258	316
Scholar (so described)	44,065	1,085	71
Total population	97,072	27,438	150,057

The proportion of boys compared with men engaged in agricultural labour is much lower in Lancashire than in Kent. The proportion of boys engaged in some industry or other is, however, higher in Lancashire.

	Under 15.	Females aged 15–20.	20 & upwards.
Lancashire—			
General servant	5,703	17,957	40,345
Cotton manufacturer	33,114	53,457	116,130
Wife, widow	...	2,084	341,605
Children, relatives, scholars	387,067	23,003	21,327
Total population	437,837	125,697	711,352
Kent (extra metropolitan)—			
General servant	1,363	6,505	8,840
Cotton manufacturer	...	...	3
Wife, widow	...	677	82,293
Children, relatives, scholars	94,063	10,898	6,803
Total population	96,408	24,582	149,715

The proportion of girls compared with women engaged as general servants is much lower in Lancashire than in Kent. The proportion of girls engaged in some industry or other is considerably higher in Lancashire, less than twenty per cent. of those aged fifteen to twenty being there classed as "children, "relatives, and scholars" against more than forty per cent. in Kent.

The principal use of the Census of ages is to assist us in making a just calculation of death-rates. The very dissimilar proportions in different places of old, middle-aged, and young people naturally tell upon the average death-rates, which, therefore, indicate very imperfectly the relative salubrity of different places. And even the proportions of the entire population of a country at different ages may change very materially.

Thus in Denmark Proper :—

POPULATION.

Ages.	1801.	1834.	1840.	1845.	1850.
0—10	213,838	284,138	291,790	313,855	326,482
10—20	161,575	257,625	261,972	256,346	266,118
20—30	149,430	199,172	218,603	243,859	238,932
30—40	123,112	163,894	172,426	175,460	195,344
40—50	107,413	120,138	133,766	146,888	154,997
50—60	83,392	97,477	95,733	100,708	110,927
60—70	56,925	63,762	67,896	71,408	70,957
70—80	23,893	29,684	32,449	33,002	35,181
80—90	5,742	7,496	7,873	8,246	8,258
90 & upwards ...	360	411	519	555	551
Totals ...	925,680	1,223,797	1,283,027	1,350,327	1,407,747

In the eleven years 1834-45 the population aged ten to twenty decreased, but the numbers aged twenty to thirty shewed a remarkable increase. Those who were twenty to thirty years old in 1845 were born in 1815-25, a period during which there was an enormous increase of births in Denmark, as well as in several other European states.

Before quitting this part of the subject, a calculation as to

the increase of population in London may perhaps be acceptable.

The Population in 1851 being		2,362,236
And in 1861.....		2,803,989
The increase appears to have been ...		441,753
The Registered births were	864,563	
Add for omissions, 3 per cent.	25,937	
	890,500	
Deduct deaths.....	610,473	
Natural increase.....	280,027	

The remaining increase, namely 161,726, represents approximately the excess of immigration over emigration.

The number of persons born in London, but resident in other parts of England was—

In 1851 231,593
In 1861 319,916

If we suppose that the 231,593 required a constant annual migration of 4,500 persons from London to merely keep up their number (which is probably not an exaggerated estimate), then 45,000 plus 88,323, the actual increase, makes 133,323 persons who must have quitted London for the English counties;* and including emigration to Scotland, Ireland, the Colonies, and foreign parts, the number may well be raised to 150,000, or even, perhaps, 170,000. The immigrants, therefore, must have amounted to something between 311,726 and 331,726. This, be it recollected, should be the balance of strangers who arrive, after deducting those strangers who leave town.

The number of persons residing in London, but born elsewhere was—

In 1851 905,509
In 1861 1,062,812

* Partly, of course, for the "home counties" surrounding London.

Assuming the deaths among the 905,509 to be from 15,000 to 17,000 annually, we have an estimated net immigration of 307,000 to 327,000 strangers, which agrees well enough with the preceding calculation.

As the increasing numbers of Londoners in the country and country people in London must require an *increasing* number of recruits to replace the losses by death, the above calculations, which do not regard that circumstance, might be amended by increasing the estimated numbers of deaths; but as the figures are, after all, partly conjectural, strict accuracy need not be studied.*

Marriages and Civil Condition.

The principal source of error in relation to the statistics of marriages is the tendency which generally exists to marry at particular churches (usually the principal ones), rather than others. The population and numbers of marriages in Manchester, Salford, and Chorlton (with Barton) districts respectively were—

	Manchester.		Salford.		Chorlton & Barton.	
	Population.	Marriages.	Population.	Marriages.	Population.	Marriages.
In 1841...	192,403	3,677	70,224	34	103,423	525
In 1851...	228,438	4,910	87,523	270	155,426	722
In 1861...	243,988	4,419	105,335	632	208,617	904

but, of course, it is not to be imagined that in Manchester there were eighteen marriages to 1,000 persons, whilst there were six in Salford, and less than five in Chorlton.

This deprives of value any ratios except those derived from entire towns or wider districts.†

There is a tendency in different parts of the country to marry at different seasons of the year; in rural districts,

* In Appendix C I have, however, re-calculated the allowances for unregistered births and for deaths among strangers, and I believe the results there shewn to be substantially correct.

† The comparison of marriages registered in the *same* district, one year with another, is not totally unreliable, even if it happen that the district be one to which couples resort, since the tendency to do so would not suddenly vary to any great extent.

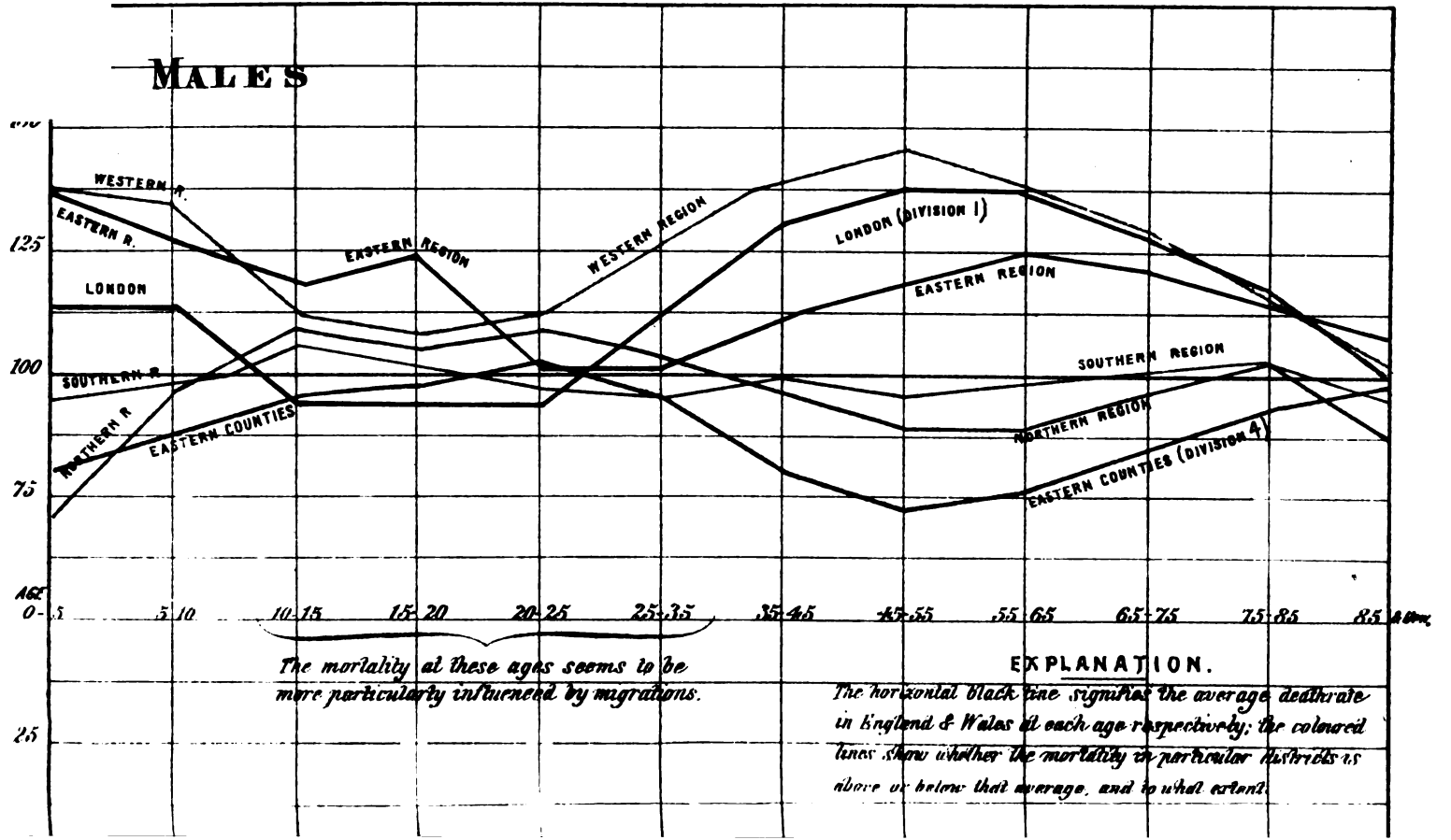
especially, the last quarter is distinguished by numerous marriages; but these inequalities are lost sight of when the total of the year is alone considered.

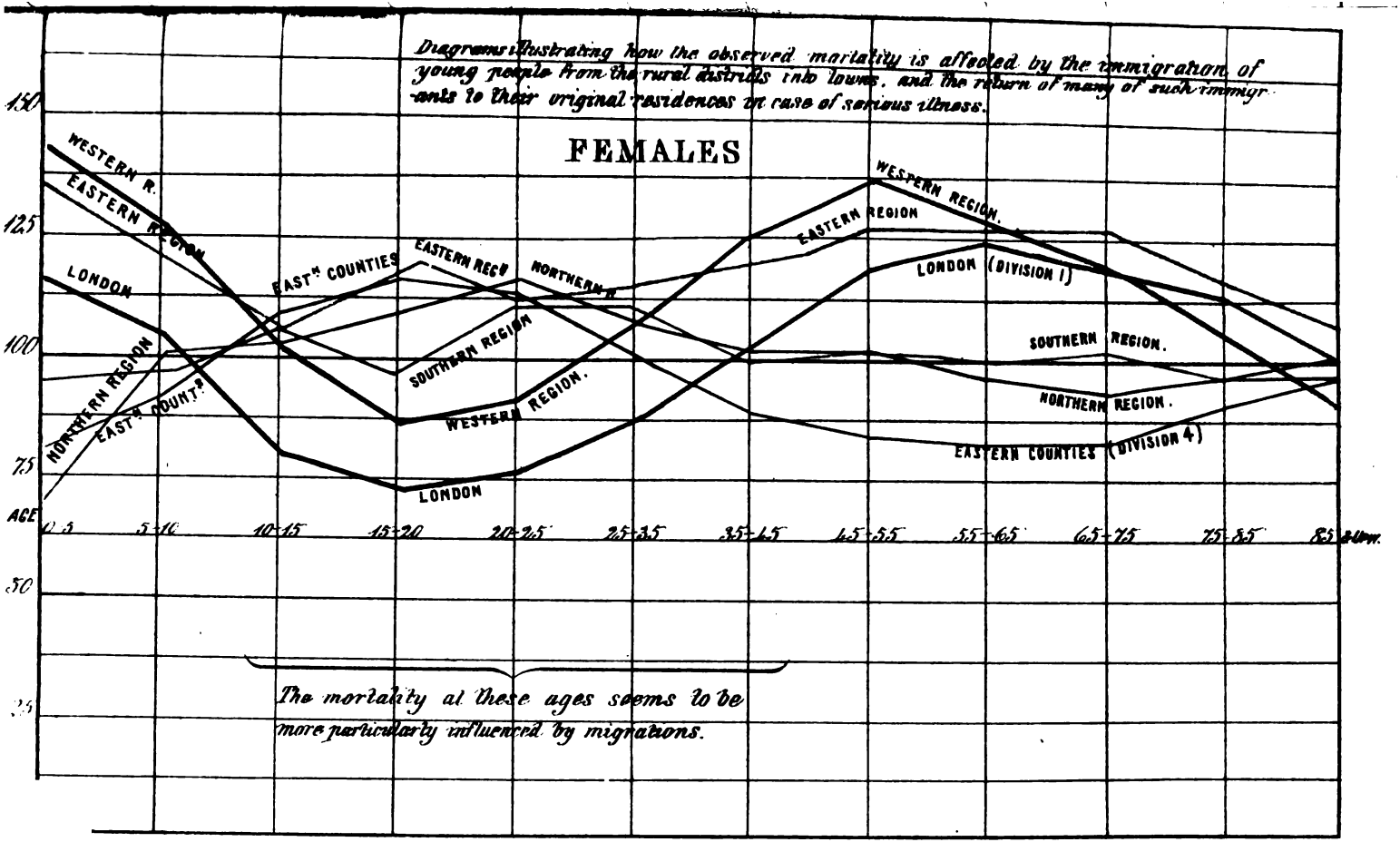
It is now possible to compare the numbers of marriages with those of unmarried and widowed persons at the marrying ages, and the numbers of legitimate births with those of married women under forty-five. The improvement in the form of the Census which admits of these comparisons was, perhaps, suggested by the Papers on the Population of Lancashire and Cheshire (*Transactions*, First Series, vol. xii).

The returns of civil condition are probably nearly correct, except that many women and some men not in the married state may have returned themselves as wives and husbands.

Mortality.

I have already noticed some of the circumstances which render average death-rates unreliable except as roughly indicating the rate of mortality in any given district. The unequal proportions of population at different ages, and the migrations of large numbers of young and healthy persons which have so much to do with that inequality, are by themselves enough to deprive such simple ratios of all pretence to accuracy. Then it is also true that some districts (usually parts of towns) contain such large numbers of inhabitants who live there, at a distance from their relatives, for the purpose of performing certain work, and who in general "go "home" in case of sickness, that no reliance whatsoever can be placed on their average death-rates. Such are London City and St. George, Hanover Square. Furthermore, the existence of large hospitals and asylums, and of workhouses, where many deaths occur, tends to destroy the value of local statistics of mortality. Deaths in the workhouse, indeed, may generally be deemed to be part of the mortality proper to the district in which the building stands; but as some


MALES
125
100
75
25
WESTERN R.
EASTERN R.
LONDON
SOUTHERN R.
NORTHERN R
EASTERN COUNTIES
EASTERN REGION
WESTERN REGION
LONDON (DIVISION 1)
EASTERN REGION
SOUTHERN REGION
NORTHERN REGION
EASTERN COUNTIES (DIVISION 4)
AGE
0-
5
5 10
10 15
15 20
20 25
25 35
35 45
45 55
55 65
65 75
75 85
85 &c.
The mortality at these ages seems to be more particularly influenced by migrations.
EXPLANATION.
The horizontal black line signifies the average deathrate in England & Wales at each age respectively; the coloured lines shew whether the mortality in particular districts is above or below that average, and to what extent.


Diagrams illustrating how the observed mortality is affected by the immigration of young people from the rural districts into towns, and the return of many of such immigrants to their original residences in case of serious illness.
FEMALES
150
125
100
75
50
25
AGE
0-5
5-10
10-15
15-20
20-25
25-35
35-45
45-55
55-65
65-75
75-85
85 & upw.
WESTERN R.
EASTERN REGION
LONDON
NORTHERN REGION
EAST.N COUNTIES
EASTERN REGN
NORTHERN R.
SOUTHERN REGION
WESTERN REGION.
LONDON
WESPERN REGION.
EASTERN REGION
LONDON (DIVISION 1)
SOUTHERN REGION.
NORTHERN REGION.
EASTERN COUNTIES (DIVISION 4)
The mortality at these ages seems to be more particularly influenced by migrations.

workhouses are situate beyond the limits of the district to which they appertain, these occasion an even greater disturbance of the death-rates than hospitals do, since the latter commonly draw a great part of their patients from neighbouring parishes.

By treating entire towns as units, and disregarding their subdivisions, the irregularities occasioned by workhouses and hospitals may to a great extent be got rid of, although county hospitals and lunatic asylums still occasion considerable disturbance of the death-rates in particular places. The fact, however, remains that towns contain immigrants in the prime of life, generally healthy persons from country places, and, therefore, subject to a comparatively low rate of mortality, and whose stay is moreover dependent in a great measure on their continuing in good health. Domestic servants in particular are apt to be numerous in towns, and are usually immigrants from some rural district, to which they return in case of sickness. In London (partly through this circumstance) the mortality among females aged ten to thirty-five appears to be much lower than the average of England and Wales.

AVERAGE ANNUAL RATE OF MORTALITY (per cent.) 1851—60.*

AGE.	ENGLAND & WALES.		LONDON.		S. E. COUNTIES.	
	Males.	Females.	Males.	Females.	Males.	Females.
0—5	7·243	6·274	8·311	7·295	5·487	4·669
5—	·851	·842	·970	·921	·720	·733
10—.....	·488	·506	·452	·415	·405	·506
15—.....	·669	·738	·625	·543	·610	·732
20—.....	·883	·853	·831	·648	·933	·885
25—.....	·957	·992	1·050	·875	1·037	·965
35—.....	1·248	1·215	1·629	1·281	1·230	1·147
45—.....	1·796	1·520	2·468	1·806	1·604	1·373
55—.....	3·085	2·701	4·243	3·327	2·673	2·440
65—.....	6·533	5·866	8·522	6·959	5·858	5·524
75—.....14·667		13·434	17·189	14·961	13·942	12·862
85 & upwards...31·008		28·956	31·441	28·892	30·787	29·332
All ages	2·305	2·132	2·570	2·182	2.022	1·889

* These figures are taken from the Supplement to the Twenty-fifth Annual Report of the Registrar General.

Let us compare the mortality in a few of the London districts :—

AVERAGE ANNUAL RATE OF MORTALITY (PER CENT.) 1851-60.

Among Males.

Age.	London City.	Kensington.	St. George, Hanover-sq.	Hackney.	Bethnal Green.	Whitechapel.	Poplar.
0—5	8·582	7·238	7·194	5·798	7·991	10·669	7·757
5	1·072	·794	·960	·746	·830	1·120	·933
10	·547	·453	·394	·470	·353	·534	·665
15	·442	·546	·344	·653	·513	·698	1·043
20	·594	·811	·552	1·032	·809	·888	1·093
25	1·015	1·003	·747	1·176	1·011	1·215	1·272
35	2·028	1·414	1·456	1·272	1·455	2·089	1·652
45	2·908	1·880	2·342	1·668	2·221	3·082	2·329
55	5·014	3·427	3·985	3·126	3·459	5·183	4·105
65	8·207	7·473	8·317	7·279	7·809	9·794	7·526
75	16·741	15·092	17·081	14·251	18·213	18·816	14·406
85 & upwards	31·773	29·878	43·701	34·656	27·669	30·418	42·761
All ages	2·367	2·281	2·137	2·118	2·457	3·017	2·542

Among Females.

0—5	7·359	6·242	6·200	4·975	7·434	9·822	6·809
5	·881	·790	·930	·729	·779	1·046	·944
10	·442	·389	·412	·418	·278	·321	·379
15	·438	·486	·378	·419	·535	·404	·532
20	·491	·475	·356	.463	·709	·788	·729
25	·713	·681	·663	·755	·818	1·100	·993
35	1·208	·952	·961	·988	1·169	1·434	1·250
45	1·754	1·406	1·640	1·373	1·624	2·295	1·759
55	3·223	2·596	3·111	2·519	3·352	3·875	2·887
65	7·761	5·856	6·457	5·512	7·010	7·788	6·319
75	15·390	13·112	14·401	13·580	14·683	16·626	13·688
85 & upwards	31·360	29·826	23·330	29·716	24·374	31·101	30·972
All ages	2·010	1·689	1·632	1·668	2·246	2·665	2·210

In Bethnal Green, Whitechapel, and Poplar, where servants aged 20 and upwards are few, the number of *young girls* employed in that capacity must necessarily be rather large, and this fact may help us to explain the low mortality recorded among girls aged 10—20. In the richer neighbourhoods, servants aged 25—45 are much more numerous than elsewhere. Then it must be borne in mind, that among the middle and richer classes it is quite usual in case of illness to take the benefit of country air, or even to go abroad ; this must further modify the death-rates materially. The country parishes, which have to bear their own mortality, and much of

that of London as well, may reasonably be expected to appear at a disadvantage in the Tables.

If these remarks are correct, the London mortality among males should not be so much nor so generally depressed as that among females, because men are less employed in domestic service, and are more apt to settle permanently where they work. The exceptions are to be looked for in such places as the City of London (where there are many unmarried warehouse and office keepers, porters, &c.) and the West End parishes. It would appear that the favourable circumstances affecting the mortality of West End populations operate to about the ages 35 among males and 45 among females; but in the other parts of the Metropolis such circumstances cease to have much influence about ten years earlier in life.

The rates of mortality in Bethnal Green are at nearly every age lower than the average of London, but particularly so at ages 5—20. Whether this arises from the mode of life of a portion of the population being such as not to entail much exertion, but to allow of existence being protracted rather through the absence of rude shocks than from the possession of the vigour necessary for sustaining such, or from any other cause, is a curious question.

Probably the fact that weavers commonly work "at home" may tend to make them care for their homes more than other workmen do, and their poverty almost necessitates a frugal and temperate mode of living, which again is characteristic of French people, and may be the less uncongenial to these descendants of French emigrants. In parishes where a rougher kind of work, better paid, has to be done, the tendency towards drunken excess and neglect of home comfort may largely contribute to aggravate mortality at all ages.

The figures generally are consistent with the hypothesis that to some extent the country sends to London its

healthiest and receives from London its least healthy* inhabitants. Infants are least subject to such interchange, and persons aged 35 years and upwards are in general so well established, or their country ties are so far severed, that they do not readily remove. The mortality at these ages, although abated by reason of numerous invalids of the better class (particularly ladies) leaving town, is decidedly high in London, though on the whole the figures are less unfavourable than might well have been anticipated.

It must not be forgotten that whilst inhabitants of London are constantly leaving town for the sake of their health, on the other hand special cases are continually arriving from the provinces for the benefit of the advice of London physicians; but in the absence of direct testimony as to the number of deaths among inhabitants of other places, temporarily living in London, I am inclined to believe it to be small. Possibly the deaths of London lunatics beyond the limits of the metropolitan division (at Hanwell and Colney Hatch) would alone be sufficient to balance such deaths.

Dr. Farr has endeavoured, by apportioning the patients and deaths in hospitals rateably among the metropolitan districts, to arrive at approximately correct local death-rates. But such a process must be exceedingly rough and inaccurate. It leaves out of view the undoubted fact that the hospitals are much more largely occupied in proportion with cases from such parishes as St. George in the East, Stepney, Whitechapel, Clerkenwell, St. Luke, and St. Giles, than from the richer neighbourhoods.† In one instance, that of "West

* Mr. Porter long ago drew attention to its being the custom of "persons whose "worldly circumstances allow of their doing so, to retire in the evening of their "days from the crowded city to the country." It may however be doubted whether such lives are on an average worse than those of persons of the like age, rich and poor, who have always resided in the country districts.

† In order to shew that this is not a trivial objection, I have made the following calculation:—

The deaths in ten years, 1851–60, excluding those in twenty-four principal

London," his corrected figures are simply incredible:

Ages.	Death-rates per Cent. Males.	Females.
0—5	10·674	9·159
5—	1·116	1·053
10—	·368	·104
15—	·181	·073
20—	·505	·423

The fact is, that a great number of deaths in St. Bartholomew's Hospital have been deducted from the "West London" mortality, and a few only added, to represent the rateable proportion, supposing all London populations equally participated in hospital accommodation; but the fact being that far more than an average proportion of West London

hospitals, were 574,363; the deaths in hospitals were 36,110, making 610,473 in all.

To every 100 male deaths not occurring in hospitals there were 8 more in hospitals; to every 100 female deaths, 4½ more in hospitals.

If, as I believe, the proportion of male deaths occurring in hospitals, to the total number of other male deaths, varies in different parishes from 5 or 6 up to 12 or 13 per cent., then if an uniform addition of 8 per cent. were made, some districts would be represented as having a mortality 3 per cent. too high, whilst in others the mortality would be understated by 4 per cent. Imagine the ratio of male deaths in Kensington to be overstated, and that in Bethnal Green understated in an extreme degree, then the following rectifications would be needful: Kensington, 2·281 minus 3 per cent., or ·07 gives 2·211 true mortality; Bethnal Green, 2·457 plus 4 per cent., or ·10 gives 2·557 true mortality; and the difference instead of ·176 becomes ·346 against Bethnal Green.

This illustration relates to the *average* death-rate, but at *particular ages* the inaccuracy becomes far more serious. Between the ages 15—55, to 72,963 male deaths not in hospital there were 16,581 in hospital, or 22½ per cent. Something like a variation from 10 or 15 up to 30 or 35 per cent. might appear if we could discover the true proportions belonging to different districts, and this would alter exceedingly the aspect of the figures.

Dr. Farr has been at the pains to apply his correction at each interval of age and to the sexes separately, because the proportions of deaths in hospital vary so much. Without recorded facts to guide him in apportioning these deaths more accurately, he could not do better than adopt the method he has pursued; but it is none the less true that until the needful corrections can be applied with greater accuracy, the rates of mortality as between one district and another will continue to be unreliable, especially between the ages 15—55 for males and 10—25 for females. At these ages, probably, the calculated mortality in the richer parishes should be diminished, and that in the poorer parishes increased, in a very sensible degree. I do not think there would be any insuperable difficulty in arranging with the 24 principal hospitals to introduce a column into their registers of in-patients, shewing where each patient had lived before coming into hospital. Such former place of residence could then be inserted in every hospital certificate of death, and the numbers of deaths might be apportioned in conformity by the Registrar General.

people die in hospital, the calculated result could not fail to be wide of the mark.

The ratios of deaths occasioned by Phthisis confirm my belief as to the reason of the low mortality in London between the ages 10—35, especially among females.

In each of the ten divisions of the kingdom, a larger ratio of females than males died of this disease in 1851—60. The average mortality in all England was

·258 males..... ·277 females

annually to 100 of either sex, but in London the order was reversed, becoming

·329 males..... ·249 females.

In particular metropolitan districts the same fact was observable, the ratios being in

Kensington.....	·335	males.....	·226	females.
St. George, Hanover-square...	·291	„	·193	„
London City	·309	„	·230	„
Bethnal Green	·294	„	·214	„
Poplar.....	·289	„	·228	„

and similarly in every district except Rotherhithe.

It would be too much to suppose that female nature is changed by residence in London. It is much more probable that many consumptive women quit London for the country. If it be true that females would naturally die in London, as elsewhere, at the rate of .019 more than males, then (assuming ***no males*** leave London because of this complaint) the female mortality ought to be ·348 instead of ·249 per cent. The difference ·099 on a population of 1,375,943 females makes 1,300 female deaths per annum, by Phthisis alone, transferred from London to country places. This estimate is perhaps too low, and the true number of both sexes may even exceed 2,000 annually.

I conclude that it would be a cautious estimate were we to assume that the deaths occurring at a distance from London, which would happen in London but for the migrations I have [illegible], are from 1,500 to 2,000 annually,—say about 800

to 1000 at ages 15—35, and from 600 to 1,000 at higher ages. The calculated ratios would be affected thus (adopting the lower estimate of the two):

Ages.	Mean Population 1851-61.	Ten Years, 1851-60. Registered Deaths.	Ten Years, 1851-60. Corrected Deaths.	Ann. Ratio, ℘ Cent. Registered Deaths.	Ann. Ratio, ℘ Cent. Corrected Deaths.
0—15	840,241	291,969	291,969	3·475	3·475
15—35	948,282	75,829	83,829	·800	·884
35 and upwards	794,589	242,675	248,675	3·054	3·130
Totals	2,583,112	610,473	624,473	2·363	2·418

The average mortality in England being 2.216, the excess of metropolitan mortality above that average is according to the Tables ·147, but by my supposition is really as much as ·202. In a word, the London death-rate is 9 per cent. above the average, instead of being only 7 per cent. in excess.

I have, as already remarked, adopted a low estimate of the correction necessary; and this because, in the first place, it is best to keep within bounds, and in the next, I do not wish to alarm too much those persons who, having hitherto implicitly relied on the returns, may now feel themselves on unsafe ground, and refuse to believe in conjectural rectifications. The following computations may help to establish that the figure is really moderate.

In 1851 and 1861 the numbers of domestic servants in London, exclusive of inn servants, were

Ages.	Males. 1851.	Males. 1861.	Females. 1851.	Females. 1861.
Under 15	991	1,193	7,287	10,320
15—20	4,014	3,806	37,564	49,241
20—25	4,410	3,840	40,440	47,625
25—35	7,219	6,140	40,761	43,128
35 and upwards	8,165	8,351	33,589	39,987
Totals	24,799	23,330	159,641	190,301

Assume that 60 per cent. of the female servants under 20 years of age, 50 per cent. of those aged 20—25, and 25 per cent. of those aged 25—35, have "a home in the country," to which they return in case of serious illness.

Assume further that there are 60,000 families the ladies belonging to which are as likely as not to leave town* in case of serious illness, especially consumption; and that besides these there are other women in London, to the extent of *at least* one-seventh of the number of those servants who have country homes, who having come from the country, and not being firmly established in town, would likewise leave in case of serious illness, then

Ages.	Average female population.	Number who would leave town if seriously unwell. Servants.	Others.	Number who would remain in town.
15—20	126,910	26,000	10,700	90,000
20—25	144,081	22,000	10,100	112,000
25—35	247,654	10,500	13,500	223,000
35 & upwards	435,037	...	24,000	411,000

Ages.	Annual Mortality per cent. Calculated on actual population.	Calculated on reduced population.	Approximate Annual deaths among those who leave town.
15—20	·543	·765	280
20—25	·648	·833	267
25—35	·875	·972	233
35 & upwards	2·872	3·040	730

This table shews a probable mortality among sick persons who leave London of 780 females at ages 15-35, and 730 at higher ages;† and adding about one-third for male deaths,

* One-half of these are treated in the Table as *certain* to leave town.

† It will be noticed that these numbers are calculated on the assumption that persons who are fresh from the country are liable to as high a rate of mortality as other residents in London. This I consider is not the case, and I, therefore, prefer to lower the estimate to 650 females and 250 males at ages under 35, and about the same numbers at the higher ages. The ratios when thus corrected would be as under.

Added for deaths at a distance in 10 years. Males.	Females.	Ages.	Uncorrected ratios. Males.	Females.	Corrected ratios. Males.	Females.
..	..	0—5	8·311	7·295	8·311	7·295
..	..	5	·970	·921	·970	·921
300	600	10	·452	·415	·477	·465
850	2100	15	·625	·543	·703	·708
750	2000	20	·831	·648	·897	·786
600	1800	25	1·050	·875	1·079	·948
450	1200	35	1·629	1·281	1·658	1·348
550	1150	45	2·468	1·806	2·521	1·900
550	1350	55	4·243	3·327	4·335	3·504
500	1450	65	8·522	6·959	8·709	7·329
350	1050	75	17·189	14·961	17·622	15·750
100	300	85 & upwards	31·441	28·892	32·525	30·385
5000	13000					

I conjecture that the corrections should be somewhat greater at ages 25–55,

the figures rise to the highest numbers estimated, without taking into account similar mortality at ages 10-15.

A comparison of the mortality by Phthisis at *the above ages* in England and London, shews how probable it is that the above figures may be moderate ones.

England. Ages.	Average Population in 1851-61. Male.	Female.	Deaths by Phthisis in 1851-60. Male.	Female.	Annual Mortality per cent. Male.	Female.
15—20	915,583	929,333	21,950	32,670	·240	·352
20—25	827,833	920,217	33,565	39,465	·405	·429
25—35	1,356,605	1,494,666	54,729	68,388	·403	·458
35 & upwards...	2,789,355	3,011,401	98,678	93,229	·354	·310

London. Ages.	Average Population in 1851-61. Male.	Female.	Deaths by Phthisis in 10 years 1851-60. Male.	Female.	Annual Mortality per cent. Male.	Female.
15—20	109,514	126,910	2,250	2,654	·206	·209
20—25	115,314	144,081	4,211	4,057	·365	·282
25—35	204,809	247,654	9,277	9,118	·453	·368
35 & upwards ...	359,552	435,037	20,022	14,075	·557	·324

Deaths by Phthisis constitute about half the total mortality at the ages 15-35. If the true female mortality by Phthisis were assumed to be fully *one per thousand* higher in London than the above ratios represent, the augmentation would not render it disproportionately greater than the male death-rates actually observed; and I do not contend for a greater augmentation than about two per thousand by *all causes* at ages 15-25, still less at ages 25-45.

After all, estimates are best avoided; and as the greater number of deaths happen at the ages under 10 years and above 45, the rates of mortality at those ages would seem to be the most likely to indicate with truth the insalubrity or healthfulness of particular localities. The wretched homes of the poor, especially in cities, tend to aggravate infantile mortality; but many adults (especially men) spend their days too far from home influences to be much injured—nevertheless the turmoil and frequent excesses of town life are probably

and smaller at the higher ages; but I do not suppose they are very far from the truth. The mortality as corrected at ages 10–35 is on the whole lower than the national average, though far less strikingly so than would appear by the Registrar General's Tables.

considerably more trying than the quieter existence of the same class in rural parishes, and even the healthy immigrants into our large towns probably lose stamina as they advance in age—hence the excessive mortality after 45.

Although I have gone so fully into the facts respecting London, it will perhaps be better not to rest my argument on a single instance, however important, and I therefore turn to the recorded mortality in several places containing many servants and other persons who would not remain there in case of sickness.

Ages.	Bath.		Cheltenham.		Brighton.		Oxford.		Cambridge.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
0—5	6·866	5·671	6·029	5·268	8·098	6·998	7·531	6·571	6·781	5·896
5	·693	·726	·845	·720	·871	·908	·960	·841	·925	·734
10	·434	·509	·302	·397	·419	·457	·476	·441	·455	·371
15	·594	·614	·469	·578	·612	·519	·503	·580	·758	·694
20	·954	·603	·698	·581	·989	·698	·500	·673	·795	·686
25	1·227	·813	·972	·793	1·160	·919	1·036	·880	1.199	·816
35	1·667	1·097	1·212	1·026	1·579	1·224	1·318	1·255	1·650	1·309
45	2·363	1·572	1·666	1·262	2·120	1·588	2·424	1·660	2·231	1·441
55	3·646	2·782	3.202	2·397	3·722	2·709	2·851	3·143	3·383	2·303
65	6·658	6·106	6·630	5·713	6·823	5·753	7·124	6·281	7·590	5·161
75 .....16·801		13·408	13·583	13·868	14·639	13·454	13·108	11·167	14·952	13·298
85 & upw. 34·681		30·325	24·706	32·807	37·917	28·413	40·000	33·333	33·636	30·370

In Bath, Cheltenham and Cambridge the infantile mortality is under, in Oxford and Brighton above the average. In Oxford the mortality among males aged 20—25 is exceedingly low, and in Cambridge, where the rate is much higher, it is still under the average. In every case, the death rates among females aged 10—35 are *under the average*. And if we bear in mind that Bath, Cheltenham and Brighton are favorite places of residence for ladies of independent means, that Cheltenham is remarkable for its educational establishments, and that the fluctuating population of Brighton was not perhaps up to its average when the Census was taken either in 1851 or in 1861, some of the figures are easily accounted for. The most singular of those which remain unexplained are the high ratio of female deaths in Oxford

at the ages 55—65, and the high death rates in Cambridge among males at several periods of life. Referring to the causes of death we find—

	Oxford.				Cambridge.			
	15—25.		55—65.		15—25.		55—65.	
	Males	Females	Males	Females	Males	Females	Males	Females
Mean Population, 1851-61..	2353	2254	515	579	3134	3158	745	951
Deaths in ten years.....	118	141	147	182	244	218	252	219
Smallpox	4	8	—	—	6	3	—	—
Scarlatina	1	3	—	—	4	6	—	—
Diphtheria.....	1	—	—	—	—	—	—	—
Typhus	7	15	4	2	32	28	6	3
Cholera, Diarrhœa, &c.	2	3	5	12	3	1	7	3
Other Zymotic Diseases	5	3	3	4	7	4	6	6
Cancer	—	1	14	13	2	1	15	23
Scrofula, &c.....	6	4	—	1	5	9	1	1
Phthisis	53	67	24	21	111	109	50	26
Hydrocephalus.....	—	—	—	—	1	—	—	—
Diseases of Brain.....	6	9	26	28	13	15	42	32
Heart Disease and Dropsy..	6	3	13	34	9	6	35	44
Disease of Lungs.....	3	5	22	33	7	9	41	36
„ of Stomach & Liver.	7	7	15	17	9	8	17	25
„ of Kidneys	1	—	4	2	3	3	10	1
„ of Generative Organs	—	1	—	1	—	—	—	2
„ of the Joints	2	—	—	—	10	—	—	—
„ of the Skin.....	—	—	1	—	—	—	—	1
Childbirth and Metria.....	—	5	—	—	—	11	—	—
Violent Deaths.....	9	6	4	1	17	3	5	1
Other Causes	5	1	12	13	5	2	17	15

These figures are hardly of sufficient magnitude to afford results of much value; but it does appear that among the young people at Cambridge Typhus and Phthisis were very fatal, whilst Cholera and diseases of the brain, heart and lungs chanced to be fatal to a considerable number of women aged 55—65 in Oxford.

Generally, when striking irregularities appear on comparing local tables of death rates deduced from the experience of a series of years, there is room to imagine that such irregularities may be owing to some epidemic; but on referring to the tables of total deaths in each year, 1851—60, no epidemic would appear to have seriously affected either Oxford or Cambridge.

In schools, the mortality of children is usually low, because they often go from thence when seriously unwell. Thus the mortality in Easthampstead district (including Sandhurst) is low at the ages 15—25, so far as regards *males*—

15—20...males ·284.....females ·906 per cent.
20—25... „ ·427..... „ ·769 „

A very thorough investigation of the number and causes of deaths at different ages and in successive years is necessary, before reliable results can be had; and local knowledge is here of great value, if carefully separated from the narrow prejudice which sometimes usurps its name. On the whole, as the statistics of small districts, subject possibly to special disturbances, can never be so reliable as those of large groups of districts, it is safest not to place much dependence upon them. Yet I would not be understood to speak slightingly of the mortuary statistics of single rural registration districts in general; they are often very interesting and valuable.

The accurate registration of "causes of death" is a desideratum towards which, I believe, we are constantly progressing,* and a skilfully devised "nosology," or classification of such causes must certainly be of the greatest importance as facilitating such progress. I leave the medical profession to decide whether the forms at present employed are capable of much improvement.

The statistics of deaths in 1860—61, arranged according to occupations, are perhaps hardly accurate enough to aid us in testing the value of the foregoing remarks. But it is well that a commencement should have been made in collecting and publishing such statistics.

A test of the abnormal composition of particular populations is furnished by the birth-rates. Where (as in London City and in St. George, Hanover Square) a large number of

* See the Twenty-seventh Annual Report of the Registrar General. (Appendix.)

persons are employed who, from the nature of their work, are necessarily in a state of celibacy, the birth-rate is low; but where such is not the case, an average birth-rate, if not something more, may commonly be expected in towns.

	Mean Population, 1851—61.	Births, 10 years, 1851—60.	Annual Birth-rate, ℘ 1000 inhabitants.
London City	50,743	11,821	23·3
Kensington	152,977	45,217	29·6
St. George, Hanover sq..	80,500	20,763	25.8
Bethnal Green	97,647	37,729	38·7
Poplar.....	63,179	25,030	39·6

It may further be inferred from these figures that birth-rates even for entire cities must usually be somewhat depressed, in consequence of the excessive proportion of unmarried young persons employed. Here again the last Census gives us valuable information—

	Males (Age 25—35.)			Females (Age 25—35.)		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed
London City.....	1,508	1,751	87	1,988	1,923	130
Kensington	3,807	8,161	152	10,956	10,008	714
S. George, Hanover-sq.	3,212	3,789	86	5,766	4,524	313
Bethnal Green	1,502	5,990	108	1,495	6,403	226
Poplar	1,969	4,681	86	936	5,353	215
London (Division) ..	67,471	144,209	2,743	88,340	165,210	8,829
England and Wales ..	444,583	930,385	21,059	475,733	1,040,244	43,988

Comment on these figures is almost superfluous. It is clear that the population of Bethnal Green is composed largely of natural families, whilst in Kensington the enormous number of domestic servants influences the figures as might have been expected. Any tendency to marry exceptionally late which may exist among the rich can scarcely be brought to a statistical test by the aid of the Census; but in Bethnal Green it is clear there must be a decided tendency to marry early.*

* I have just noticed in the twenty-seventh Report of the Registrar-General (page lxvii.) the following words, which indicate a belief that the apparent female mortality in London is reduced, for the reason I have assigned, below its true

Conclusion.

I have now touched upon each of the subjects I proposed to speak of, and indicated very imperfectly their importance and the degree of accuracy attainable. In working out results, the statist must be prepared to find other causes of uncertainty besides those to which I have adverted, but I have endeavoured to describe the most serious ones, and I am sure that a certain degree of order and method founded on experience is of the first necessity in approaching a subject where so little ingenuity will often suffice to confuse the enquirer. Not only mere perversity or self-interest, but even a want of clearsightedness and perhaps some habitual bias of the mind or sheer carelessness will frequently lead writers to false conclusions, against which it is difficult to be sufficiently on our guard.

I am especially anxious to assist in establishing and in making widely known, accurate bases for comparison of population statistics, since it is only by learning what is normal, by acquiring a true sense of the natural and symmetrical order which things tend to assume, that we can become competent to pronounce upon phenomena of any kind. And in doing this, I am solicitous to avoid the narrow pedantry which may sometimes imperceptibly steal upon statists more accustomed to consider figures from a mathematical point of view than to compare them with facts.

amount. "Phthisis and bronchial complaints are more fatal both to men and "women in Liverpool and Manchester than in London. But if the Metropolis "is compared with ten other large divisions of England it is found that phthisis "is more fatal to males in London than in any other division, not excepting "the north-western counties, which include the towns just mentioned. But the "mortality of females from that disease is singularly low, partly perhaps because "domestic servants, shopwomen, and milliners, who have come from the country, "retire when health fails them to their native air. On the other hand the "death-rate from bronchitis and pneumonia, for both males and females, is high; "it is higher in London than in any of the ten groups of counties." Bronchitis and pneumonia are most fatal in infancy and after 45, therefore London is not relieved of much mortality from these causes by migration. I think not London only, but Liverpool and Manchester also, would shew higher female death-rates from phthisis were it not for the reason given.

I might almost add, that statistical science performs its most important service to mankind, *not* by teaching truths, but by refuting and preventing the general acceptance of errors, especially on social questions. Be this as it may, it cannot be doubted but that many observations which are now matters of ordinary belief would still be fiercely contested, did no evidence exist of a statistical nature, to which reference could be made.*

* I have noticed with surprise that the practice is not yet entirely disused of reckoning the ratios of births, marriages, and deaths not in centesimal proportions, but as "one in so many persons." These proportional figures are highly inconvenient for purposes of comparison, and I regret that the decimal form, which really cannot be excelled, should not be exclusively used.

APPENDIX A.

Suggested Statistical Divisions.

1. LONDON.—The Registration Division of London, the counties of Kent, Surrey, Sussex, Hants (except Fordingbridge, Ringwood and Christchurch), Berks, Oxford, Buckingham, Bedford, Huntingdon, Hertford, Middlesex, Essex, Suffolk, (except Mutford, Wangford, Blything, and Hoxne), Cambridge (except Wisbech and Whittlesey), and Northampton (except Peterborough and Oundle).
2. BIRMINGHAM—The Counties of Warwick and Worcester, and the districts of Tamworth, Lichfield, Penkridge, Wolverhampton, Walsall, West Bromwich, and Dudley in Staffordshire, Shiffnal, Madeley, Bridgenorth, and Cleobury Mortimer in Salop, Ledbury and Bromyard in Herefordshire.
3. BRISTOL.—The Counties of Gloucester, Wilts (except Alderbury, Salisbury, Amesbury, Wilton, Tisbury and Mere), and Somerset (except Yeovil, Taunton, Wincanton, Chard, Wellington, and Williton).
4. DEVON.—The County of Devon (except Totnes, Kingsbridge, Plympton St. Mary, Plymouth, East Stonehouse, Stoke Damerel, and Tavistock), and the districts of Taunton, Chard, Wellington, and Williton in Somerset, and Stratton in Cornwall.
5. DORSET.—The County of Dorset, with Alderbury, Salisbury, Amesbury, Wilton, Tisbury, and Mere in Wilts, Wincanton and Yeovil in Somerset, Christchurch, Ringwood, and Fordingbridge in Hants.
6. CORNWALL.—The County of Cornwall (except Stratton), and the districts of Totnes, Kingsbridge, Plympton St. Mary, Plymouth, East Stonehouse, Stoke Damerel, and Tavistock in Devon.

7. Norwich.—The County of Norfolk, with Mutford, Wangford, Blything, and Hoxne in Suffolk, and Wisbech in Cambridgeshire.

8. Lincoln.—The Counties of Lincoln (except Glanford Brigg, Caistor, and Louth), and Rutland, and the districts of East Retford, and Newark in Nottingham, Oundle and Peterborough in Northamptonshire, and Whittlesey in Cambridge.

9. Nottingham.—The Counties of Nottingham (except East Retford, Newark, and Worksop), Leicester and Derby (except Hayfield, Chapel-en-le-Frith, Chesterfield, and Bakewell), and the district of Burton-on-Trent in Staffordshire.

10. Potteries.—The districts of Stoke-upon-Trent, Wolstanton, Newcastle-under-Lyne, Leek, Cheadle, Uttoxeter, Stafford, and Stone in Staffordshire, and Newport in Salop.

11. South Wales.—The Counties of Monmouth, Glamorgan, Carmarthen, Pembroke, Cardigan, Brecon, Radnor, and Hereford (except Ledbury and Bromyard).

12. North Wales.—The Counties of Anglesey, Carnarvon, Merioneth, Denbigh, Montgomery, Flint, and Salop (except Shiffnal, Madeley, Bridgenorth, Cleobury Mortimer, and Newport), and the districts of Great Boughton and Nantwich in Cheshire.

13. Lancashire.—The Counties of Lancaster (except Ulverston and Lancaster), and Chester (except Nantwich and Great Boughton), and the districts of Saddleworth in the West Riding, Hayfield and Chapel-en-le-Frith in Derbyshire.

14. Leeds.—The Registration districts of Leeds, Hunslet, Bradford, Dewsbury, Wakefield, Pontefract, Hemsworth, Barnsley, Halifax, Huddersfield, Todmorden, Keighley, Otley, Skipton, and Settle, all in the West Riding.

15. Sheffield.—The Registration districts of Sheffield, Wortley, Ecclesall Bierlow, Rotherham, and Doncaster in the West Riding, Chesterfield and Bakewell in Derbyshire, and Worksop in Nottinghamshire.

16. East Yorkshire.—The East Riding of Yorkshire, and the districts of Whitby, Scarborough, Pickering, Helmsley, Malton, and Easingwold in the North Riding, Tadcaster, Selby, Goole, and Thorne in the West Riding, Glanford Brigg, Caistor, and Louth in Lincolnshire.

17. NORTH YORKSHIRE.—The North Riding (except Whitby, Scarborough, Pickering, Helmsley, Easingwold and Malton), and the districts of Teesdale, Darlington, and Stockton in Durham, Ripon, Pateley Bridge and Knaresborough in the West Riding.
18. NEWCASTLE.—The Counties of Northumberland (except Haltwhistle), and Durham (except Teesdale, Darlington, and Stockton).
19. CARLISLE.—The Counties of Cumberland and Westmorland, and the districts of Haltwhistle in Northumberland, Ulverston and Lancaster in Lancashire, Sedbergh in the West Riding.

APPENDIX B.

Concerning Density and Increase of Population in London.

TABLE VII.—AREA, INHABITED HOUSES, AND POPULATION OF THE CENTRAL PARTS OF LONDON IN 1841, 1851, AND 1861.

	Area excluding water. Acres.	Inhabited Houses. 1841	1851	1861	Population. 1841	1851	1861
East to North—							
City of London District ..	379	7,921	7,297	6,362	55,930	55,933	45,555
Whitechapel do ..	363	8,634	8,812	8,664	71,765	79,759	78,970
St. George-in-the-East do.	243	5,985	6,146	6,169	41,360	48,376	48,891
Shadwell Sub-district.....	109	2,006	2,047	1,501	14,168	16,179	12,537
Mile End Old Town Upper Sub-district	191	4,159	4,500	4,829	25,570	29,582	33,747
Bethnal Green "Town" Sub-district	96	2,641	2,690	2,671	19,998	20,941	21,486
St. Leonard Shoreditch do.	75	2,857	2,866	2,854	17,976	19,449	19,188
Holywell Sub-district.....	68	2,146	2,201	2,154	16,722	17,245	17,313
East London District.....	153	4,796	4,739	4,489	39,655	44,406	40,687
St. Luke do.	220	6,385	6,349	6,356	49,839	54,055	57,073
	1,917	47,730	47,647	46,049	352,953	385,924	375,447
North to West—							
West London District	124	3,010	2,670	2,580	29,142	28,833	27,145
Clerkenwell do.	360	6,953	7,224	7,088	56,756	64,778	65,681
Holborn do.	196	4,603	4,311	4,109	44,461	46,621	44,862
Gray's Inn Lane Sub-dist..	156	2,657	2,946	2,887	22,149	26,523	27,808
St. Giles District.....	245	4,959	4,700	4,690	54,292	54,214	54,076
Tottenham Court Sub-dist.	145	2,607	2,586	2,603	26,800	28,433	29,371
All Souls do.	112	2,449	2,441	2,417	27,003	28,841	29,952
Cavendish Square do.	113	1,793	1,718	1,764	15,192	14,687	15,090
Rectory do.	116	2,209	2,177	2,143	26,714	27,633	26,692
St. Mary (Marylebone) do.	108	2,294	2,249	2,272	21,988	22,814	22,493
	1,694	33,534	33,022	32,553	324,497	343,377	343,170
West to South—							
Strand District.....	142	4,327	3,949	3,775	43,598	44,417	42,979
St. James (Westminster) do.	164	3,590	3,399	3,333	37,398	36,406	35,326
St. Martin-in-the-Fields do.	283	2,439	2,307	2,240	25,091	24,640	22,689
Westminster do.	839	6,439	6,642	6,798	56,719	65,609	68,213
Hanover Square Sub-dist...	445	2,190	2,184	2,156	21,398	20,216	19,773
May Fair do.	136	1,557	1,611	1,668	15,048	12,980	12,885
Waterloo Road First do. ..	68	1,713	1,729	1,736	12,767	14,068	15,269
Waterloo Road Second do...	99	2,269	2,191	2,179	17,319	18,348	18,640
Lambeth Church First do.	154	2,710	2,451	2,429	18,446	18,409	19,839
Lambeth Church Second do.	186	3,579	3,849	3,918	22,931	26,784	29,542
	2,516	30,913	30,312	30,232	270,708	281,897	285,155
South to East—							
St. Saviour District	200	4,659	4,600	4,471	32,975	35,731	36,170
St. Olave do	125	2,523	2,360	2,209	19,837	19,575	19,056
St. George (Southwark) do.	282	6,663	6,492	7,238	46,644	51,824	55,510
Trinity (Newington) Sub-district	142	3,122	3,224	3,410	19,064	20,922	22,675
Leather Market do.....	92	2,074	2,279	2,395	12,775	15,295	16,696
	841	19,041	19,455	19,723	131,295	143,147	150,107
Summary—							
East to North	1,917	47,730	47,647	46,049	352,953	385,924	375,447
North to West	1,694	33,534	33,022	32,553	324,497	343,377	343,170
West to South	2,516	30,913	30,312	30,232	270,708	281,897	285,155
South to East	841	19,041	19,455	19,723	131,295	143,147	150,107
	6,968	131,218	130,436	128,557	1,079,453	1,154,345	1,153,879

NOTE.—The Police on duty, 3,090 in 1841, were separately returned in that year, and not included in the populations of the respective districts, neither were persons on board vessels included in that year's Census; these latter numbered in 1851 3,635 in the Central parts, and 4,179 in the rest of the Metropolitan division, including 391 beyond the limits of what I have called the external districts.

TABLE VIII.—AREA, INHABITED HOUSES, AND POPULATION OF THE EXTERNAL PARTS OF LONDON IN 1841, 1851, AND 1861.

	Area excluding water.	Inhabited Houses.			Population.		
	Acres.	1841	1851	1861	1841	1851	1861
East to North—							
Poplar District	2,613	5,066	6,831	11,123	31,122	47,162	79,196
Limehouse Sub district	249	2,634	3 209	3,694	19,337	22,782	27,161
Ratcliff do.	113	1,819	2,076	2,946	11,874	15,218	16,874
Mile End Old Town lower Sub-district	490	3,546	4 367	5 929	19,738	27,020	39,317
The Green (Bethnal) do	391	2,780	3,503	4,466	16,766	23,555	31,789
Church (Bethnal) do	132	3,081	3,497	3,849	17,293	21,787	25,528
Hackney Road do.	141	3,280	3,608	3,745	20,031	23,910	26,298
Hackney District	3,929	7,192	9,818	13,392	42 261	58,429	83,295
Haggerstone East Sub-dist.	125	1.256	1,829	2,507	6,976	11,351	17,310
Haggerstone West do.	132	1,901	2 973	3,142	12,013	20,276	23,260
Hoxton Old Town do.	116	2,143	2,386	3,233	13,994	17,431	25,177
Hoxton New Town do.	130	2,339	3,132	3,182	15,751	23,505	26,516
Islington East do.	1,899	4,609	6,931	11,277	30,294	47,448	79,899
	10,460	41,846	54,160	71,785	257,450	359,868	502,220
North to West—							
Islington West Sub-district	1,228	3,899	6,607	9,427	25,396	47,881	75,442
Kentish Town do.	1,634	1,560	3,248	5,980	10,398	21,326	44,317
Camden Town do.	171	1,807	2,498	2,550	15,018	21,115	23,266
Somers Town do.	184	3,243	3,731	3,907	28,910	35,641	39,099
Regent's Park do.	427	2,892	3,575	3,925	26,488	31 918	34,927
Hampstead District	2,252	1,411	1,719	2,653	10,093	11,986	19,106
St John Sub-district	542	2,244	3,652	4,161	18,356	29,826	32 540
Christ Church do.	518	3,180	3,589	3,600	28,911	33,895	34,913
St. Mary, Paddington, do	827	940	2,278	4,826	6,436	17,252	39,015
St. John, Paddington, do	450	2,539	3,825	4,861	18,737	29,053	36,769
	8,233	23,715	34,722	45,890	188,743	281,893	379,394
West to South—							
Kensington Town Sub-dist	1,214	2,393	3,996	6,909	17 369	29,183	51,910
St. Peter, Hammersmith, do.	189	629	813	1,000	3,565	4,467	5,415
St. Paul, Hammersmith, do	2,103	1,585	2,302	3,164	9,868	13,293	19,104
Fulham do	1,684	1,471	1,797	2,481	9,319	11,886	15,539
Brompton do.	698	1,405	2,150	2,572	9,465	14,870	18,198
Chelsea District	800	5 648	7,591	8,314	40,179	56,538	63,439
Belgrave Sub-district	595	3,783	4 997	6,613	30,106	40,034	55,113
Wandsworth District	11,443	6 459	8,276	11,186	39.855	50,764	70,403
Kennington First Sub-dist.	452	3,082	3,977	4,761	17,235	24,261	30,785
Kennington Second do.	510	2,424	3,248	3,523	14,054	18,818	20 440
Brixton do	1,445	1,622	2,362	3,223	10.175	14,810	20,067
Norwood do.	916	412	600	1,141	2,961	3,977	7,462
	22.069	30,893	42,139	54,887	204,171	282 731	377,875
South to East—							
Camberwell District	4,342	6,843	9,412	12,098	32 868	54,667	71,488
St. Peter, Walworth, Sub-dis.	321	4,162	4,925	6,975	23,299	29,861	44 463
St. Mary, Newington, do	161	2,086	2,309	2,355	12,243	14,033	15,082
St. Mary Magdalen, Bermondsey, Sub-district	142	1,477	1,865	2,195	9,721	13,934	16,505
St. James, Bermondsey, do.	427	2,123	2,863	3,630	12,451	18,899	25,154
Rotherhithe District	749	2,490	2,792	3,521	13,917	17,805	24 502
St. Paul, Deptford, Sub-dis.	1,587	3,371	4,177	5,905	18,664	24,899	37,834
St. Nicholas, Deptford, do.	110	1,095	1,122	1,172	6,953	7,071	8,139
Greenwich West do.	301	2,924	3 300	3 651	16,552	18,800	21,696
Greenwich East do	1,425	1,571	2,064	2,497	13,043	16,228	18,306
Lee do	2,399	1,123	1,415	1,876	6,938	8,478	11,817
Lewisham Village do	5,418	956	1,088	1,326	5,380	6,097	7,373
Sydenham do.		516	801	1,656	2.915	4,501	10,595
	17,382	30,667	38,133	48,857	181.944	235,273	312,943
Summary—							
East to North	10,460	41,846	54.160	71,785	257,450	359,868	502,220
North to West	8,233	23,715	34,722	45,890	188,743	281,893	379,394
West to South	22,069	30,893	42 139	54,887	204,171	282,731	377,875
South to East	17,382	30,667	38,133	48,857	181,944	235,273	312,943
	58,144	127,121	169,154	221,419	832,308	1,159,765	1,572,432

The results of Tables VII and VIII may be summarised as under, together with similar statistics for Woolwich and some adjacent portions of the Metropolitan Division not deemed to be parts of London.

	Western.		Eastern.		Woolwich, &c., excluded from Table VIII.
	Central.	External.	Central.	External.	
Acres	4,210	30,302	2,758	27,842	10,139
Houses 1841	64,447	54,608	66,771	72,513	4,405
„ 1851	63,334	76,861	67,102	92,293	6,343
„ 1861	62,785	100,777	65,772	120,642	9,445
Population 1841...	595,205	392,914	484,248	439,394	33,566
„ 1851...	625,274	564,624	529,071	595,141	48,126
„ 1861...	628,325	757,269	525,554	815,163	77,678

The circuit from Holloway by Hammersmith to Norwood is very little greater than that by Blackwall. But to be accurate, we should add Stratford and West Ham subdistricts (population 41,189 in 1861) to the eastern half, and the populations of the two moieties of London would then be nearly equal—say, 1,385,594 inhabitants in the western, 1,381,906 in the eastern half. In 1841 the respective populations were 988,119 in the western, 938,030 in the eastern moiety (including Stratford and West Ham). Population has, therefore, increased with the greatest rapidity on the eastern or unfashionable side, which bids fair to become more populous than the other.

It will be observed that above 1,150,000 persons are located in the central districts, where, although in 1841 there was a little vacant building land, there can hardly be any space now for new houses, and the probabilities are in favour of a decrease in population rather than an increase, as docks, warehouses, &c., may be constructed where dwellings now stand.

In the Western Central districts there are ten inhabitants, on an average, to each house; in the Eastern, only eight. In the Western suburbs there are 7·5 inhabitants to each house; in the Eastern, 6·8.

The houses in the Eastern districts are doubtless smaller, but they are more numerous than in the West. In the Western fully-built districts (including, however, several of the Parks) there are about 15 houses to the acre; in the Eastern area of a like character, 24 to the acre.

Table IX shews the density of population in each of the Central districts. It will be observed that in most of them a certain degree of crowding has taken place, the average number of inhabitants *per house* having increased materially in the ten years 1841—51, and the

increase having been generally maintained in the next ten years. The highest density observed is about 300 persons per acre.

If the external districts should ever be as densely peopled as the Central ones now are, their population will be four or five times as great as it now is; for the present, therefore, the rate of increase in these districts is almost certain to be rapid. But it will vary in each case according to circumstances. Some of the external districts are almost covered with houses already; others possess immense reserves of land, much of it conveniently situate for building purposes.

It should be remembered that ratios of births and deaths, calculated for districts, depend altogether on the population assumed as a divisor, and therefore, if anything like accuracy is to be attempted, censuses of the populations of great cities should be taken at intervals of *three or four years*,—say once or twice in the interval between the decennial censuses; or a register of dwelling-houses erected and demolished, annually published with the Registrar's Reports, would probably furnish material for a close approximation.

If, on the other hand, a *rough estimate* of the actual populations of the different districts be desired, it may be had after this fashion:

	Kensington.	Islington.	Hackney.
Births, 1850—52 (average)	3,658	3,170	1,818
„ 1860—62 „	5,672	5,456	2,721
„ 1865	6,891	6,743	3,323
Population, 1851	120,004	95,329	58,429
„ 1861	185,950	155,341	83,295
Births to 1000 persons, 1851 ...	30·5	33·3	31·1
„ „ 1861 ...	30·5	35·1	32·7
Estimated population in 1865, assuming the ratio of births in that year to be the mean of the two figures above calculated	226,000	197,000	104,000

TABLE IX.—NUMBER OF INHABITANTS PER HOUSE AND PER ACRE, AND NUMBER OF INHABITED HOUSES PER ACRE, IN THE CENTRAL PARTS OF LONDON.

	Inhabitants per House.			Inhabitants per Acre.			Houses per acre in 1861.
	1841	1851	1861	1841	1851	1861	
East to North—							
City of London District	7·1	7·7	7·2	148	148	120	16·8
*Whitechapel do.	8·1	9·1	9·1	187	208	206	22·6
†St. George-in-the-East do.	6·9	7·9	7·9	170	199	201	26·4
†Shadwell Sub-district	7·1	7·9	8·4	130	148	115	13·8
Mile End Old Town Upper do.	6·1	6·6	7·0	134	155	177	25·3
Bethnal Green "Town" do.	7·6	7·8	8·0	208	218	224	27·8
St. Leonard (Shoreditch) do.	6·3	6·8	6·7	240	259	256	38·1
Holywell do.	7·8	7·8	8·0	246	254	255	31·7
East London District	8·3	9·4	9·1	259	290	266	29·3
St. Luke do.	7·8	8·5	9·0	226	246	259	28·9
Average	7·4	8·1	8·2	184	201	196	24·0
North to West—							
West London District	9·7	10·8	10·5	235	233	219	20·8
Clerkenwell do.	8·2	9·0	9·3	149	170	173	18·7
Holborn do.	9·7	10·8	10·9	227	238	229	21·0
Gray's Inn Lane Sub-district	8·3	9·0	9·6	143	171	179	18·6
St. Giles District	10·9	11·5	11·5	222	221	221	19·1
Tottenham Court Sub-district	10·3	11·0	11·3	185	196	203	18·0
All Souls do.	11·0	11·8	12·4	241	258	267	21·6
Cavendish Square do.	8·5	8·5	8·6	134	130	134	15·6
Rectory do.	12·1	12·7	12·5	230	238	210	18·5
St. Mary (Marylebone) do.	9·6	10·1	9·9	204	211	208	21·0
Average	9·7	10·4	10·5	197	203	203	19·2
West to South—							
Strand District	10·1	11·2	11·4	307	313	303	26·6
St. James (Westminster) do.	10·4	10·7	10·6	228	222	215	20·3
‡St. Martin-in-the-Fields do.	10·3	10·7	10·1	89	87	80	7·9
§Westminster	8·8	9·9	10·0	68	78	81	8·1
‖Hanover Square Sub-district	9·8	9·3	9·2	48	45	44	4·8
May Fair do.	9·1	8·1	7·7	111	95	95	12·3
Waterloo road, First do.	7·5	8·1	8·8	188	207	225	25·5
Waterloo road, Second do.	7·6	8·4	8·6	175	185	188	22·0
Lambeth Church, First do.	6·6	7·5	8·2	120	120	129	15·8
Lambeth Church, Second do.	6·4	7·0	7·5	123	144	159	21·1
Average	8·8	9·3	9·4	108	112	113	12·0
South to East—							
St. Saviour District	7·1	7·8	8·1	165	179	181	22·4
St. Olave do.	7·9	8·2	8·6	159	155	152	17·7
St. George (Southwark) do.	7·0	7·4	7·7	165	184	197	25·7
Trinity (Newington) Sub-district	6·1	6·5	6·6	134	147	160	24·0
Leather Market do.	6·2	6·7	7·0	139	166	181	26·0
Average	6·9	7·4	7·6	156	170	178	23·5

* Includes St. Katharine Dock and the Tower of London.
† Includes London Docks; the Shadwell Basin was constructed between 1851 and 1861.
‡ Includes Green Park and part of St. James's Park.
§ Includes great part of Kensington Gardens, and the rest of St. James's Park.
‖ Includes Hyde Park.

APPENDIX C.

Movement of Population in England and Wales.

TABLE X.—SHEWING THE PROBABLE NUMBER OF ENGLISH CHILDREN AGED 0–5 ON 1st JULY, 1861.

	Children Estimated to Survive, Aged					Children Aged 0—5	
	0—1	1—2	2—3	3—4	4—5	Estimated to survive.	Enumerated.
I. London	85,188	74,631	68,421	64,766	62,278	355,284	362,296
II. South Eastern ..	52,445	48,698	45,892	44,113	43,072	234,220	238,466
III. South Midland ..	38,501	35,920	33,809	32,708	32,274	173,212	173,367
IV. Eastern	32,915	31,187	29,848	28,412	28,346	150,708	151,020
V. South Western ..	53,095	49,528	47,094	44,532	44,013	238,262	238,725
VI. West Midland ..	78,806	71,126	66,187	62,060	60,404	338,583	338,682
VII. North Midland ..	39,691	36,975	34,158	32,833	32,639	176,296	174,764
VIII. North Western ..	94,582	82,787	75,769	72,081	69,179	394,398	403,241
IX. York.....	65,247	58,392	53,843	51,946	51,404	280,832	278,581
X. Northern	38,614	34,956	32,481	30,540	30,322	166,933	165,005
XI. Welsh	40,171	37,761	35,597	33,086	33,037	179,652	176,635
Totals.....	619,275	561,961	523,099	497,077	486,968	2,688,380	2,700,782

The above Table was thus calculated. The children aged 4—5 on 1st July, 1861, would average about 4½ years old, and their births must have taken place in the year between 1st July, 1856, and 1st July, 1857. Assume as a basis, therefore, the mean number of births in 1856 and 1857, and deduct the deaths among children aged 0—1 in 1857, 1—2 in 1858, 2—3 in 1859, 3—4 in 1860, and part of the deaths at the age 4—5 in 1861. Some of the children had been exposed to five years mortality, others to only four; therefore part only of the mortality occurring in the fifth year must be deducted, in order to obtain a just estimate. Proceeding in the same way to ascertain the probable numbers of children aged 3—4, 2—3, 1—2, and 0—1 in July, 1861, the above Table is the result.

The figures would exactly agree with those given by Dr. Farr in his paper (*Statistical Journal*, March, 1865), but that I have made a different allowance for the number of deaths deductable in consideration

of the mortality in the year next preceding the Census. At all ages but 0—1 he has assumed that a moiety of a full year's deaths should be deducted. At that age he deducts very much more than a moiety, but does not explain the basis of his correction. I take it that when the mortality is constantly abating, as it is during the first five years, more than a moiety of a year's deaths must always fall within the calculation. Thus, of 12,000 children aged 0—1 at the Census—

About 1,000 must have been born within a month, and average fifteen days old; on these the heavy mortality of the first days of life has fallen.

About 1,000 must have been born a month earlier, and average six weeks old; these also have had their ranks much thinned.

About 1,000 must be aged between ten and eleven months; on these and on those a month older, almost a year's mortality has fallen, for the deaths in the last two months are comparatively few.

To make up the year's deaths, the mortality which will happen to each rank of children before its attaining a full year has to be added. It is manifest this will be less than the mortality already sustained.

Dr. Farr's own words are—"Of 1,000 children born simultaneously, "851 live one year, 149 die, and 903 will on an average be found living "at a Census in the first year of their age;" *i.e.*, of 149, being the deaths in the first year of life, 97 or rather less than two-thirds occur within the fractions of a year (averaging six months) preceding a Census, and the other 52 occur in the period (also averaging six months) after the Census, which the children have to pass before attaining a full year. I do not know how, in the face of this statement, he has happened to calculate that of 106,428 deaths among children under one year old, as many as 94,164 should be deducted as dying before the Census, reducing the births 690,227 to 596,063 living. I have preferred to deduct only two-thirds, or 70,952, leaving 619,275 living.

I have also, at the next three ages, preferred to calculate 60 per cent. of deaths before and 40 after the Census day, rather than divide the deaths equally between the two periods. At the age 4—5 I have adopted Dr. Farr's figure.

The next consideration is, that the figures thus obtained represent the probable population on 1st July, 1861, whereas the Census was taken in April. Dr. Farr mentions that, in consequence of this, the births assumed do not correspond with the actual births from which the

Census numbers were derived. But they do not deviate widely on the whole, thus:

			Actual Births.		
1st Apr.	1856, to Mar.	31st,	1857—658,633	Assumed number,	660,262
,,	1857	,,	1858—663,600	,, ,,	659,276
,,	1858	,,	1859—660,054	,, ,,	672,681
,,	1859	,,	1860—697,529	,, ,,	186,965
,,	1860	,,	1861—673,801	,, ,,	690,227
			3,353,617		3,369,411

and if we reduce the estimated number of survivors by 15,000, sufficient allowance will probably have been made for the difference referred to.

Dr. Farr has pointed out that many children are registered as being one year above their real age, and also that infants are to some extent carried out of the country; besides which, a few may escape enumeration.

If we assume that the births unregistered (independent of those of children whose deaths also are unregistered) amount to nearly 3 per cent. of the whole, say 18,000 per annum, then the following allowances can be afforded for these inaccuracies:—

First, 2,000 per annum aged 0—5 may be assumed to be carried out of the country, in excess of the numerous infants arriving with immigrants from Ireland, &c. The allowance for such would consequently be 5,000.

Next, one in 200, or 13,200, might be allowed for infants who escape enumeration.

Thirdly,	24,354	infants aged	0—1
	67,975	,, ,,	1—2
	57,493	,, ,,	2—3
	56,374	,, ,,	3—4
	44,398	,, ,,	4—5

might be assumed to be returned as one year older than their real age, the total number of surviving children under five years of age being not 2,688,380 but 2,763,380 by hypothesis, including the 5,000 assumed to be taken away by emigrants.

I believe these figures are ample;* and, applying a similar gross correction locally, I find that the allowance for unregistered births in each Division, during the years 1851—60, may be fairly reckoned as set forth in the next Table.

* It is true the births in the years 1851–56 which escaped registration were probably somewhat more numerous than 18,000 per annum, but in the absence of any reliable measure of the unregistered births during that period, I prefer to avoid the risk of exaggeration.

TABLE XI.

Division.	Births 1851-60.			Deaths 1851-60.	Natural Increase.		Actual Increase in Civil Counties.
	Registered.	Add for unregistered. Per cent.	Add for unregistered. Number.		In Registration Counties.	In Civil Counties.	
I. London	864,563	4½	38,800	610,473	292,890	292,890	441,753
II. South Eastern	536,806	4	21,500	349,803	218,503	214,713	219 131
III. South Midland	414,329	2	8,300	258,508	164,121	162,571	62,264
IV. Eastern	361,970	2	7,200	232,213	136,957	141,647	27,472
V. South Western	564,805	2	11,300	364,127	211,978	211,698	31,724
VI. West Midland	810,100	2	16,200	511,133	315,167	319,717	302 346
VII. North Midland	426,036	1½	6,400	264,184	168,254	170,934	77,689
VIII. North Western	999,820	5	50,000	691,835	357,985	357,875	447,907
IX. York	695,439	1½	10,400	439,313	266,526	269,126	235,615
X. Northern	385,888	1½	5,200	233,146	158,542	153,892	169,440
XI. Welsh	411,892	1	4,100	265,980	150,012	145,962	123,274
Totals	6,471,650		180,000	4,210,715	2,440,935	2,440,935	2,138,615

Division.	Born in the Division, but resident elsewhere in England.			Born elsewhere in England, but resident in the Division.		
	1851	1861	Estimated Deaths 1851-60	1851	1861	Estimated Deaths 1851-60
I. London	231,593	319,916	52,000	723,156	853,052	130,000
II. South Eastern	300,644	372,694	57,000	218,125	343,488	50,000
III. South Midland	239,151	304,855	46,000	171,308	207,872	34,000
IV. Eastern	207,917	273,621	40,000	74,336	99,163	15,500
V. South Western	276,006	347,259	54,000	92,732	120,048	19,000
VI. West Midland	250,386	310,553	50,000	225,521	296,535	47,000
VII. North Midland	177,403	236,506	37,000	107,569	129,405	21,000
VIII. North Western	129,599	168,803	26,500	288,535	365,780	61,000
IX. York	186,759	239,421	39,000	147,922	203,561	31,500
X. Northern	85,705	107,806	17,500	66,800	99,049	15,000
XI. Welsh	111,272	139,104	22,500	82,411	112,585	17,500
Totals	2,198,415	2,820,538	441,500	2,198,415	2,820,538	441,500

Division.	Irish, Scotch, Foreigners, &c., resident in the Division.			Immigration in excess of Emigration.		Emigration (in excess of those who returned home) of natives of the Division.	
	1851	1861	Estimated Deaths 1851-60	Of English from other Divisions.	Of Irish, Scotch, Foreigners, &c.	To other English Divisions.	To Ireland, Scotland, and Abroad.
I. London	182,353	209,760	35,000	259,896	62,407	140,323	33,117
II. South Eastern	38,969	61,913	8,500	175,363	31,444	129,050	73,239
III. South Midland	14,056	16,581	2,500	70,564	5,025	111,704	64,192
IV. Eastern	9,152	12,170	1,750	40,327	4,768	105,704	53,566
V. South Western	23,178	30,976	4,500	46,316	12,298	123,253	115,235
VI. West Midland	54,715	68,229	9,500	118,014	23,014	110,187	48,212
VII. North Midland	16,460	20,122	3,000	42,636	6,662	96,103	46,640
VIII. North Western	262,847	314,470	64,000	128,245	115,623	65,704	88,132
IX. York	57,804	69,526	10,000	87,139	21,794	91,662	50,712
X. Northern	77,157	105,231	15,000	47,349	43,174	39,601	35,184
XI. Welsh	25,525	37,194	5,000	47,674	16,669	50,339	36,699
Totals	762,216	946,274	158,750	1,063,623	342,806	1,063,623	645,128

The figures are not perfectly accurate, because the deaths amongst persons who are not residing in the division where they were born have to be estimated; but since such persons are to a great extent people at the period of life when mortality is lowest (few of them comparatively being infants or aged), we are safe in assuming that the deaths amongst them can hardly be much more numerous, and, perhaps, are even fewer than are calculated above.

Another source of inaccuracy (which is, however, of very secondary importance when dealing with large divisions), is the defective form of the Census of 1851 as to birthplaces, which, as formerly explained, compels a resort to estimates. The figures shewn above (except the columns of births and deaths) relate to groups of *civil* counties (closely corresponding in their boundaries and population with the respective registration divisions), and not to the actual divisions. The migrations within such groups of counties correspond closely with those in the registration divisions, and can be ascertained with much less difficulty as the tables are now framed. To prepare a table founded on the figures for registration counties would be a work of so much labour, and the results would differ so little from those obtained as above-mentioned, that I have not considered the task to be one which I need undertake.*

It will be seen that the number of emigrants leaving this country, less the number of persons of English birth returning from abroad, is estimated at 645,128. This figure results from the assumptions that 180,000 births escaped registration, and that 158,750 deaths took place among strangers resident in this country. By increasing either figure we should augment our estimate of the number of emigrants to the same extent.

The words of Dr. Farr with reference to emigration may here be quoted. He says—"The Emigration Commissioners have only distinguished the emigrants of English origin from the rest since 1853, when their records shew that 454,422 English people of all ages left our shores. The average annual number of English emigrants was 56,803, and the number in the ten years, if this average is adopted for 1851—52, is 568,027. But the emigration of 1851—52 was heavy, and it bore chiefly on the Irish people. At the Census, by applying the *proportion* of later years, the emigrants were estimated at 640,316."

* The chief difficulty is that the birthplaces of the inhabitants of the registration counties are not shewn in the last Census, but would have to be arrived at by adding together the figures for each separate district.

On the above shewing, I am inclined to think that 600,000 would be a fair estimate of actual emigration of persons of English birth from this country in 1851—61. To this must be added the increase in the numbers of the Army, Navy, and Merchant Seamen abroad. The increase in question was from 126,561 to 162,273, and as probably more than 20,000 deaths occurred among this absent portion of our population, 55,000 must be added to the roll of emigrants. Then it is likely that 35,000 persons may have gone to Scotland and Ireland; so that in all 690,000 English people quitted their country.

Small numbers of persons travelling abroad, and emigrants who escaped being enumerated by the Commissioners, are still to be accounted for; but against these we may set a more considerable influx of returning emigrants, which was in all likelihood sufficient to diminish the total drain of native inhabitants to about 650,000, though in the absence of data it is only possible to hazard a conjecture.

Enough, perhaps, has been said to convince the enquirer that each of the estimates shewn in the tables is a near approximation to the truth. They in some measure support each other, and none can be very materially altered without producing results which would appear less probable than those shewn. Some little augmentation of the estimates of unregistered births and of deaths* seems to me to be probably justifiable, but I do not desire to exaggerate the movement of population, which is striking enough on the face of my estimates. Any change in the calculated number of deaths (441,500) among persons who reside out of their own division would affect both sides of the account—although not every division alike.

I have paid no regard to possible omissions in the Census of Numbers, for these were doubtless as numerous in 1851 as in 1861, and at all events there is no knowing what degree of importance to attach to such omissions.

I have assumed that the strangers resident in this country returned their birthplaces correctly; but if, as Dr. Farr suggests, many Irish returned themselves as English, something should be added to the calculated numbers of Irish immigrants and of English emigrants.

The migration into and from particular divisions would appear to be less or more according to the boundary chosen. For example, a Londoner removing to Richmond counts as migrating out of his division;

* The calculations as to deaths would be much facilitated if the Census Tables exhibited the ages of all strangers Irish, Scotch, and others, living in our divisions, and not merely the ages of foreigners.

but if the boundary of that division were a circle extending fifteen miles from St. Paul's Cathedral, he and thousands of others would not appear in the tables as having removed.

Again, it is certain that besides the 33,117 natives of London who emigrated, thousands of natives of other parts of England, settled in London, also emigrated from thence. The number of such emigrants serves to depress the *nett* immigration from the provinces into London to 259,896. It also diminishes the corresponding numbers of country people shewn to have emigrated from their own to other English divisions. If alterations were required to be made with a view to shew the actual emigration from each division, the figure 33,117 would have to be increased by transferring to it part of the other numbers making up 645,128; but the fact would still remain that, whether direct or *vid* London, the numbers of *natives* of the several divisions set down in the table had left this country.

APPENDIX D.

Some Statistics of Lancashire and Cheshire.

I have here gathered together a few tables as to birthplaces, ages, civil condition, births, deaths, and marriages, and migration within the North Western Division. I have adhered to the limits of that division, although I have elsewhere, on general grounds, suggested a somewhat different boundary; purely for reasons of convenience, and because, after all, the two boundaries are not extravagantly unlike.

Table XII is similar to Table XIX in Vol. XI of the Society's *Transactions*. The proportion of Irish and other strangers will be seen to have increased between 1851 and 1861 from 13·9 to 15·4 per cent. of the adult population; in Blackburn the proportion was doubled. Immigrants from the neighbouring counties were not relatively more numerous than in 1851, but the ratio of persons from a distance exceeding fifty miles had on the whole been augmented by 10 per cent.

Table XIII resembles Table XX of the older series, with the exception that it shews the percentages of *total* numbers of natives of different counties resident in the division, and not those of persons aged 20 years and upwards. The percentages of adults who have quitted the place of their birth are considerably higher than those of persons of all ages, including children.

The relative numbers of strangers within the division who have come from beyond the fifty-mile limit will be seen to have sensiby increased, the numbers being—

	1851.	1861.
Natives.....	925,423	1,072,630
From counties within 50 miles.....	180,688	207,875
„ „ beyond 50-mile limit.....	58,333	75,327
„ Ireland, Scotland, and abroad.....	187,386	246,999

Table XIV is on a new plan. It shews what I estimate to have been the nett influx of natives of other places and the nett efflux of natives of Lancashire and Cheshire during the ten years 1851—61. The

numbers for 1851 have been corrected (by estimate) so as to shew approximately how many strangers there were in the *civil* counties at that time, and *vice versa*.

It will be seen that from counties within the fifty-mile limit, a nett gain of 49,852 persons had been derived; from other counties a nett gain of 12,689 persons. From beyond England and Wales there was an immigration of 115,623 against an emigration of Lancashire people numbering 88,132, the nett gain being therefore 27,491 persons. Total augmentation of population in excess of natural increase, 90,032 persons.

Omitting all notice of the fact that many of the 1,935,579 natives of Lancashire and Cheshire living in the civil counties in 1851 were the descendants of Irish and other immigrants, it may be said that 78 per cent. of the inhabitants were then natives, and 22 per cent. were strangers. But these strangers included a larger proportion of adults than the natives, and it would be fair to suppose that nearly 30 per cent. of the subsequent births have occurred amongst them. Let us, however, adopt a lower figure, and imagine that as few as 150,000 of such children survived among the "native" population enumerated in 1861. Then 2,264,618 "natives," reduced by 150,000, would leave 2,114,618 genuine Lancashire and Cheshire people,—against 670,250 strangers and 150,000 children of strangers; together, 28 per cent. of the whole.

The operation would take place thus:

	Natives.		Strangers.
In 1851	1,935,579		551,382
Add corrected births, allowing for 250,000 children of strangers	799,600		250,000
	2,735,179		801,382
Deduct deaths (less 225,000, including 100,000 deaths among the 250,000 infants)	466,725		225,000
	2,268,454		576,382
Deduct emigration	153,836	add immigration	243,868
	2,114,618		820,250

In this calculation it is not noticed that the *natives* who emigrate doubtless include a few of the children of strangers; but the extremely high death-rate assigned to these children must fully counterbalance that omission. And if in ten years the 1,935,579 natives only increased

to 2,114,618, whilst the 551,382 strangers increased to 820,250, it may be inferred that at no distant period the strangers *and their descendant* will outnumber the natives, if they do not do so already.

It will be observed, on again referring to Table XIV, that the Division generally gains a greater number of immigrants than it sends emigrants to other English and Welsh counties. Denbigh is no exception to the rule, because the immigrants from "Wales (county not stated)" must come partly from that county, and are very numerous. The real exceptions are Durham, Glamorgan, Essex, the three Metropolitan counties, Sussex, and Hampshire. The figures for London itself are pretty evenly balanced.

In what capacity Lancashire men go to reside in the two mining counties I cannot say; but there are some hundreds of soldiers at Aldershot, Chatham, and Portsmouth, who were born in the North-western Counties, and whose removal from other quarters may partially account for the small augmentations of Lancashire men elsewhere observed. The unusual increase in the neighbourhood of London arises perhaps from the erection of new suburbs, in which persons arriving from a distance are apt to take up their abode. The number of wealthy natives of the North-western Division, who remove to the Southern Counties for the sake of a more agreeable residence, seems less striking than might have been anticipated; the increase in Sussex is probably of that character, and in London the proportion of natives of Lancashire is much more considerable in the Western than in the worst of the Eastern districts.

It will be observed that the Table before us exhibits the final result of various migrations, in many cases not direct from Lancashire to the places where additional numbers of natives of that county are found, but not the less requiring a total exodus from Lancashire equal to that stated in the Table, and indicating by such result the localities which are ultimately most attractive for Lancashire people. Thus, if one native of Lancashire had removed from that county to Yorkshire, and another then resident in Yorkshire had removed to Durham, the Table would shew the nett result only, viz., one Lancashire man gained by Durham and lost by Lancashire.

The Table might be expanded at pleasure by ascertaining the approximate loss or gain of Lancashire people in each registration district out of Lancashire, and the loss or gain of strangers in every registration district in Lancashire. Nothing of the kind has ever been attempted; indeed, so far as I am aware, this is the first enquiry

founded on the census of birthplaces which has been directed to the subject.

Table XV shews the estimated number of unregistered births in the years 1856—61 in each district. These figures are of assistance to us in correcting our estimate of the nett total of immigration or emigration into or from each registration district, and also in connection with birth-rates.

In preparing this Table the method described in Appendix C has been adhered to. The number which it is estimated should be living differs by 3,400 from that shewn in Table X, just as 2,688,380 is reduced to 2,673,380. The number of children ascertained at date of the Census is increased by 2½ per cent., just as 2,700,782 is increased by

	5,000	children taken away by emigrants.
	13,200	„ supposed to have escaped enumeration.
	44,398	„ supposed to have been incorrectly returned as aged five years and upwards.
Total	62,598	

In the working out of these figures irregularities of a contradictory character appear. In several districts the computed numbers of children, derived from the numbers of registered births and deaths, are actually *greater* than those ascertained at the Census, plus the allowance of 2½ per cent. In these cases it is possible that more than the usual numbers have been inaccurately returned as aged fully five years; from some of the districts, such as Stockport and Macclesfield, whole families have doubtless migrated; and again, more than one in two hundred may have escaped enumeration. Be the cause of the irregularity what it may, we should not be justified in supposing that many unregistered births can have occurred in those districts which shew, per hypothesis, less than none.

On the other hand, the figures for Liverpool and West Derby shew such excessive proportions of unregistered births as must needs excite suspicion of error. And bearing in mind the prodigious immigration into Liverpool from Ireland and other places not far distant, it may well be supposed that the immigrants bring far greater numbers of children than the emigrants take away. If we were to assume that 3,000 children under five years of age, not being natives of Liverpool or West Derby, were enumerated there in 1861, the computed number of unregistered births would still be 7,699 or 9·3 per cent.

Guided by these and similar considerations, I have, in constructing

Table XVI, somewhat modified the ratios of unregistered births assumed to have occurred.

Table XVI shews the nett immigration or emigration just referred to, assuming equal numbers of male and female births to have been unregistered, and that the numbers unregistered in 1841—50 amounted to 75,000, or 50 per cent. more than the total number roughly estimated to have escaped registration in the succeeding decennium. The corrections applied in this Table are in a great measure conjectural, but probably give a truer notion of the actual result of the migrations which took place between 1841 and 1861 than could otherwise be attained.

Columns are added to shew the estimated immigration from a distance into each district. These are arrived at by the method used in constructing Table XIV, and may be considered reliable.

Table XVII is like Table XXV of the old series (Vol. XII of the Society's *Transactions*). But Table XVIII, which is on a new plan, sets the civil conditions of the population in a clearer light. In it the married population at all ages is treated as an unit, and the relative proportions of unmarried, married, and widowed persons at three periods of life are shewn. The ratios of the unmarried vary exceedingly, and a Table of Occupation Statistics would be highly interesting as throwing light on the causes of these dissimilarities; but to do justice to the subject, an entire paper at the least should be devoted to it. The proportions of widows will be seen to bear out my opinion formerly expressed, that the high mortality in Liverpool and Manchester is the principal cause of the unusual disparity there observed between the numbers of widowers and widows.

The excess of female population, it will be seen, does not consist, as is often romantically supposed, of maidens who can find no partners, but of widows, many of them of advanced age.

Table XIX, shewing the proportions at the higher ages to 100 children under 10 years of age, resembles Table XXVI of the old series. With a somewhat diminished mortality and a sustained birth rate, the proportion of children has increased, and that of adults has consequently diminished, the more strikingly because the number of immigrants was less considerable in 1851—61 than in the preceding 10 years. But the demand for the labour of girls in the eastern region has been such as to attract great numbers, and by that means nearly

maintain the proportion of females above 10 years of age to children at the high point at which it stood in 1851.

Tables XX and XXI are continuations of Tables XXIX and XXX of the old set,—similarly without any correction for unregistered births. The proportions of births to one marriage are, however, omitted, as not answering any useful purpose, now that we are for the first time enabled to compare the numbers of legitimate births with those of married women under 45 years of age.

The ratios of births, it will be seen, are low in Manchester and other important towns in the eastern region, and especially low in Liverpool.* They are extraordinarily high in Wigan and Ulverston, and are far above the national average in most of the rural districts.

In explanation of these facts it may be noted—first, that wherever married women are extensively engaged in laborious occupations, and indeed wherever the mortality among infants is excessive, it may reasonably be supposed that miscarriages and still-births are also excessively numerous. The conceptions may, it is submitted, be not less numerous relatively in Liverpool than elsewhere, but fewer terminate in the birth of a living child.

In the next place, allowance must be made for the unusual numbers of births unregistered, especially in Liverpool.

If these explanations taken together be not adequate, there is still another to be offered before we accept the idea that the fecundity of the women of the large towns is naturally less than that of country women. It is that, whether the American practice of abortion, which appears to have attained awful proportions in New York and Boston, or the French practices tending to hinder conceptions, have found favour with the socialist and materialist element amongst the lower classes of our large towns, either would diminish, to an extent we cannot measure, the number of living births.

The high proportions of births to the female population of mining districts is, perhaps, the result of a laxity of manners, which, while occasioning many illegitimate births, also leads to the marriage of girls who bear children rather than of those who do not. On this and many other points local information would be very interesting.

The following figures, shewing the ratios of births in the eleven

* It seems that the registered numbers of illegitimate as well as of legitimate births are few in Liverpool. It has been seen that many births escape registration; and then prostitution rather than seduction is the vice of great cities.

divisions in 1851—60, will throw some light on the question, as to what may be considered normal ratios.

Division.	Births legitimate and illegitimate to every 100 women aged 20–45.	Legitimate births to every 100 married women under 45.
I.—London	15·1	25·3
II.—South Eastern.....	17·3	27·2
III.—South Midland	18·7	28·0
IV.—Eastern	18·6	26·9
V.—South Western	17·4	28·3
VI.—West Midland.....	19·6	28·9
VII.—North Midland	19·4	28·4
VIII.—North Western	18·4	28·3
IX.—York.....	20·0	29·1
X.—Northern.....	20·6	30·0
XI.—Welsh	19·3	29·7
England and Wales ...	18·2	28·0

The proportions of marriages to bachelors and widowers *aged* 20—45 are also given in Table XXI, instead of, as formerly, the ratios per 100 bachelors *of all ages*. The effect is to diminish the disparity which appeared to exist between the marriage rates in the rural and town districts. It is nevertheless sufficiently evident that marriages are more frequent, in about the proportion of 7 to 5 or 6, in the manufacturing and commercial than in the agricultural districts.

The most striking lesson to be derived from this column is, however, that the ratios of marriages are even less reliable than I supposed when I wrote the remarks in the body of this paper. In Oldham, the marriage rate seems to be very low, yet Oldham contains a full proportion of young married people, and the proportion of births to 100 *women* aged 20—45 is *higher* than in Manchester. The reason is not far to seek. Most marriages are celebrated at the residence of the bride. Now although many inhabitants of Oldham marry in their own town, it would be wonderful if a large proportion did not find wives in the neighbouring City of Manchester. Hence the marriage rate in Manchester represents to a certain extent the marriages of men from Oldham and other neighbouring places, and as no corresponding number of Manchester men would appear to be married in Oldham, the rate in the latter place represents far less than the true force of the tendency to marry. It may be asked, how do the rest of the Oldham women become wives, the marriages solemnized there being too few in comparison with the total number of unmarried women, and yet there being no excess of spinsters? The explanation may be, that whilst

many wives are brought thither, spinsters go thence in considerable numbers to other not distant places, where employment suitable for them may more readily be obtained.

The only manner in which ratios less misleading, as to the proportionate numbers of marriages, could be had, would seem to be by classifying marriages under the districts in which the bridegrooms resided before marriage. This would however involve considerable labour, and might not be productive of any commensurate benefit. Even then the ratios would not in every case represent the tendency of the general public to marry, unless soldiers' marriages were separately dealt with. The following Table will make this clear:—

Division.	Marriages in ten years 1851-60.	Bachelors and Widowers aged 20-45.		Annual Marriages to every 100 Bachelors & Widowers aged 20-45.	Numbers of men in the Army and Navy aged 20 and upwards in 1861.
		1851.	1861.		
I. London	264,153	186,141	193,782	13·9	18 866
II. South Eastern	125,264	126,839	147,947	9·0	50,365
III. South Midland	87,551	83,894	75,209	11·0	2,830
IV. Eastern.....	79 503	73,850	63,856	11·5	5,458
V. South Western	137,704	117,582	106,377	12·3	17,967
VI. West Midland.....	199,284	156,113	156,297	12·8	3,642
VII. North Midland	99,565	85,165	78,548	12·2	1,515
VIII. North Western	257,942	191,458	197,003	13·2	4,912
IX. York	168,609	132,499	132,345	12·7	3,053
X. Northern	84,368	79,102	89,068	10·0	1,288
XI. Welsh.....	98,468	98,724	97,940	10·0	2,836
England & Wales ..	1,601,731	1,333,297	1,338,392	12·0	112,752

The greater part of the soldiery being bachelors under 45 years of age, it will be obvious how powerfully their exclusion from the calculation would tend to bring up the ratio of marriages in the South-eastern Division to the national standard.

Table XXII resembles Table XXXI of the old series, but as the Government Tables (*Supplement to Twenty-fifth Annual Report of the Registrar-General*) furnish the ratios of mortality at a greater number of ages, I have availed myself of them.

What I have elsewhere said, as to the circumstances which render these ratios somewhat unreliable at the ages 10—45, should be borne in mind in perusing these figures. It is manifest that the necessary corrections, could they be made, would generally tend to add to the apparent rates of mortality in the eastern and western regions, and to abate them in the others; so that, for example, the high female death

rates in Macclesfield inadequately represent the sacrifice of life amongst women resident there.

Lunatic asylums at Lancaster, Manchester, Warrington, Prescot, Chester, and Stockport, and hospitals at Manchester, Liverpool, Wirral, Chester, and Stockport, contribute to augment the apparent mortality at those places.

Before quitting the subject of death-rates, it may be well to refer to the different and sometimes contrary fluctuations in the numbers of deaths at different ages.

Thus, in England and Wales the following numbers of deaths were recorded :—

	Males.			
Year.	Aged 0–10.	Aged 10–55.	Aged 55 and upwards.	Total.
1856	93,311	55,832	49,732	198,875
1857	101,712	57,540	53,104	212,356
1858	111,789	59,771	55,660	227,220
1859	109,520	59,479	54,577	223,576
1860	98,363	58,802	58,073	215,238
1861	105,403	59,754	57,124	222,281
1862	105,183	60,915	56,524	222,622
1863	120,861	63,474	57,868	242,203
1864	119,306	69,711	64,602	253,619
1865	117,206	70,657	64,355	252,218

Here we may remark an increase of 10 per cent. in the deaths at the higher ages (in 1863—65), accompanied by a diminished mortality among children; and (in 1860—63) an increase of 20 per cent. in the deaths among children, accompanied by a decrease of deaths among the aged.

The wet, cold year 1860 was in fact favourable to infant life, especially to infants in crowded neighbourhoods, but quite otherwise to persons aged 55 and upwards.

It would, perhaps, be too much to expect that in the Weekly Returns deaths among children and old people should be distinguished; but it is certain that any sensible increase in the mortality at the ages 10—55 is more severely felt than a more considerable augmentation at lower or higher ages would be.

TABLE XII.—BIRTHPLACES OF INHABITANTS AGED 20 YEARS AND UPWARDS, 1861.

Registration Districts.	Born in				Per Centage on Adult Population.			
	The County or Counties Proper in which the Reg. Dist. is situate.	The other Counties * within the 50 mile limit.	Other parts of England and Wales.	Scotland, Ireland, Colonies, and Foreign Parts.	Born in same County or Counties.	Born in other Counties within the 50 mile limit.	Born in other parts of England and Wales.	Born in Scotland, Ireland, &c.
Ulverston	13,317	3,865	740	707	71·5	20·7	4·0	3·8
Lancaster	13,805	3,942	612	822	72·0	20·6	3·2	4·3
Garstang	6,124	285	66	108	93·0	4·3	1·0	1·6
Fylde	11,176	853	413	1,948	81·6	6·2	3·0	9·1
Clitheroe *(y)*	10,650	227	138	287	94·2	2·0	1·2	2·5
Northern Region..	55,072	9,172	1,969	3,172	79·4	13·2	2·8	4·6
Burnley	31,091	6,351	719	1,817	77·8	15·9	1·8	4·5
Haslingden	28,614	4,670	1,120	2,689	77·1	12·6	3·0	7·2
Blackburn	52,097	4,224	908	5,383	83 2	6·7	1·5	8·6
Preston	47,399	4,126	1,830	6,838	78·7	6·9	3·0	11·4
Chorley	19,545	808	295	1,062	90 0	3·7	1·4	4·9
Wigan	39,654	2,189	1,187	5,624	81·5	4·5	2·4	11·6
Leigh	17,581	1,013	326	1,342	86·8	5·0	1·6	6·6
Bolton	57,465	4 514	1,353	5,966	82·9	6·5	2·0	8·6
Bury	46,044	4,398	1,071	3,360	83·9	8·0	2·0	6·1
Rochdale	38,836	6,782	1,274	3,536	77·0	13·4	2·5	7·0
Oldham	44 518	9,757	1,303	5,238	73·2	16·0	2·1	8·6
Ashton-under-Lyne(c)	49,456	14,589	2,089	8,256	66·5	19·6	2·8	11·1
Barton-upon-Irwell..	15,580	3,223	946	1,514	73·3	15·2	4·4	7·1
Manchester	71,432	25,714	7,472	32,733	52·0	18·7	5·4	23·8
Salford	33,406	12,465	3,585	9,072	57·1	21·3	6·1	15·5
Chorlton	43,806	28,532	8,294	14,332	46 1	30·0	8·7	15·1
Stockport *(l)*	38,420	6,510	1,682	6,057	72·9	12·4	3·2	11·5
Macclesfie ld	24,030	7,103	1,284	2,175	69·5	20·5	3·7	6·3
Eastern Region ..	698,974	146,968	36,738	116,994	69 9	14·7	3·7	11·7
Ormskirk	20,105	1,777	673	1,984	81·9	7·2	2·7	8·1
Prescot	25.093	3,927	1,476	6,982	67·0	10·5	3·9	18·6
West Derby	53,329	30,904	11,553	27,078	43·4	25·2	9·4	22·0
Liverpool	49,575	26,014	11,908	69,040	31·7	16·6	7 6	44·1
Birkenhead	6,295	13,645	3,675	9,735	18·9	40·9	11·0	29 2
Wirral	5,279	2,757	703	979	54·3	28 4	7·2	10·1
Western Region ..	159,676	79,024	29,988	115,798	41 5	20·6	7·8	30·1
Warrington *(c)*	16,996	1,506	865	3,620	73·9	6·6	3·8	15·7
Runcorn	10,151	2,644	520	907	71·4	18·6	3·7	6·4
Altrincham	14,303	5,214	1,249	1,699	63·7	23·2	5·6	7·6
Congleton *(s)*	15,751	1,271	676	724	85·5	6·9	3·7	3·9
Northwich	14,468	1,637	450	839	83·2	9·4	2·6	4·8
Nantwich	15,675	4,458	997	785	71 5	20·3	4·5	3·6
Great Boughton *(f)* ..	21,745	5,800	1,875	2,461	68·2	18·2	5·9	7·7
Southern Region..	109,089	22,530	6,632	11,035	73·1	15·1	4·4	7·4
Grand Totals	1,022,811	257,694	75,327	246,999	63·8	16·1	4·7	15·4

* Including Islands in the British Seas.

(c) Includes part of Cheshire. *(l)* Includes part of Lancashire. *(y)* Includes part of Yorkshire. *(s)* Includes part of Staffordshire. *(f)* Includes part of Flint.

TABLE XIII.—BIRTHPLACES OF INHABITANTS IN 1861.

Counties Proper, &c., where Born.	Living in Lancashire and Cheshire (Registration Counties.)			Living in England and Wales.	Per cent. living in North Western Division.
	Under 20 yrs. of age.	Aged 20 yrs. & upwards.	All Ages.		
Lancashire	975,916	860,848	1,836,764	1,966,038	93·4
Cheshire	206,348	211,782	418,130	467,383	89·5
Totals	1,182,264	1,072,630	2,254,894	2,433,421	92·7
Cumberland	3,400	15,265	18,665	213,754	8·7
Westmoreland	2,510	9,817	12,327	70,101	17·6
Yorkshire	27,176	77,936	105,112	1,999,942	5·3
Nottingham	1,345	5,105	6,450	303,082	2·1
Derby	5,761	20,444	26,205	349,133	7·5
Stafford	8,280	19,906	28,186	683,151	4·1
Salop	2,478	13,108	15,586	284,162	5·5
Montgomery	354	2,233	2,587	77,590	3·3
Merioneth	182	1,173	1,355	45,573	3·1
Carnarvon	776	3,134	3,910	95,377	4 1
Anglesey	624	3,389	4,013	59,643	6·7
Denbigh	1,641	7,998	9,639	105,781	9·1
Flint	5,079	12,054	17,133	77,101	22·2
Wales, county not stated	2,407	11,124	13,531	27,461	49·3
Islands in British Seas	1,163	5,189	6,352	18,423	34·5
Totals	63,176	207,875	271,051	4,408,274	6·1
Northumberland	929	2,648	3,577	329,803	1 1
Durham	1,418	2,646	4,064	407,552	1·0
Lincoln	1,250	4,396	5,646	447,486	1·3
Rutland	34	188	222	26,977	·8
Leicester	770	2,800	3,570	265,012	1·3
Warwick	2,941	5,958	8,899	499,620	1·8
Worcester	907	2,798	3,705	316,913	1·2
Hereford	252	970	1,222	137,696	·9
Radnor	31	119	150	32,715	·5
Brecknock	34	101	135	62,138	·2
Cardigan	132	491	623	83,210	·7
Pembroke	191	795	986	107,656	·9
Carmarthen	55	295	350	136,453	·3
Glamorgan	308	540	848	225,737	·4
Monmouth	310	571	881	141,303	·6
Gloucester	1,340	4,065	5,405	490,883	1·1
Oxford	228	971	1,199	197,891	·6
Northampton	667	1,780	2,447	246,805	1·0
Huntingdon	181	393	574	73,354	·8
Cambridge	760	1,097	1,857	193,044	1.0
Norfolk	694	2,303	2,997	500,909	·6
Suffolk	401	2,004	2,405	400,804	·6
Essex	369	1,293	1,662	437 494	·4
Middlesex, extra metropolitan	119	398	517	132,604	·4
London	6,279	15,288	21,547	2,061,093	1·0
Hertford	150	554	704	192,461	·4
Bedford	208	653	861	141,197	·6
Buckingham	341	1,007	1,348	193,891	·7
Berks	197	807	1,004	196,223	·5
Wilts	273	1.140	1,413	305,871	·5
Somerset	795	3,012	3,807	499 191	·8
Devon	985	4,126	5,111	627,718	·8
Cornwall	392	1,765	2,157	390,851	·6
Dorset	202	831	1,033	209,340	·5
Hants	656	2,010	2,668	442,122	·6
Surrey, extra metropolitan	238	816	1,054	221,151	·5
Sussex	307	1,195	1,502	372,323	·4
Kent, extra metropolitan	763	2,523	3,286	549,085	·6
England, county not stated	..	..	..	102	..
Totals	26,039	75 327	101,366	12,296,780	·8
Scotland	9,472	33 210	42,682	160,202	25·2
Ireland	46,092	199,961	246,043	601,634	40·9
Brit. Colonies & East Indies	2.267	3,223	5,490	51,572	10 6
Foreign Parts	3,284	10,254	13,538	101,832	13·3
Born at sea	125	351	476	3,509	13·6
Totals	61 230	246,999	308,229	927,749	33·2
Grand Totals	1,332,709	1,602,831	2,935,540	20,066,224	14·6

TABLE XIV.

Civil Counties, &c.	Persons born there found in Lancashire and Cheshire (Civil Counties).				Persons born in Lancashire and Cheshire (Civil Counties) found there.			
	1851	1861	Approx. Deaths.	Immi-gration.	1851	1861	Approx. Deaths.	Emi-gration.
Cumberland	16,419	18,661	3,330	5,572	4,138	5,173	825	1,860
Westmorland	10,894	12,304	2,200	3,610	4,722	5,072	870	1,220
Yorkshire	81,510	102,728	17,300	38,518	36,593	42,020	7,000	12,427
Nottingham	5,041	6,463	1,100	2,522	1,438	2,0 9	310	931
Derby	24,664	26,518	4,860	6,714	9,879	12,144	1,960	4,225
Stafford	21,167	25,386	4,420	8,639	13 948	19,323	2,950	8,325
Salop	13,928	15,863	2,830	4,765	4,299	5,093	835	1,629
Montgomery	2,180	2,571	450	841	313	487	70	244
Merioneth	1,347	1.351	260	264	195	235	40	80
Carnarvon	3,436	3,878	700	1,142	1,021	1,292	205	476
Anglesey	3,777	3,999	740	962	871	1,111	175	415
Denbigh	10,278	9,545	1,880	1,147	2,413	3,299	510	1,396
Flint	11,242	11,689	2,180	2,627	3,2 3	3,985	640	1,392
Wales (county not stated)	8,471	13,530	2,090	7,149	..	..	..	..
	214,354	254,486	44,340	84,472	83,063	101,293	16,390	34,690
Northumberland	2,901	3,570	615	1,284	1,263	1,977	290	1,004
Durham	2,912	4,051	660	1,799	2,569	4,814	650	2,895
Lincoln	3,454	5,644	865	3,055	1,300	1,991	240	331
Rutland	148	221	35	108	48	50	10	12
Leicester	2,495	3,571	575	1,651	722	1 000	150	428
Warwick	6,019	8,866	1,415	4,262	4,923	6,709	1,030	2,816
Worcester	2,544	3,693	590	1,739	1,312	2,001	295	984
Hereford	848	1,224	200	576	220	481	60	321
Radnor	124	149	25	50	52	63	10	21
Brecknock	96	135	20	59	82	104	15	37
Cardigan	522	621	110	209	108	121	20	33
Pembroke	849	981	175	307	141	381	45	285
Carmarthen	334	350	65	81	106	109	20	23
Glamorgan	544	845	135	436	529	1,143	150	764
Monmouth	454	880	125	551	389	501	80	192
Gloucester	3,743	5,413	870	2,540	1,730	2,272	355	897
Oxford	792	1,198	190	596	355	387	65	97
Northampton	1,583	2,437	380	1,234	759	788	135	164
Huntingdon	286	575	80	369	86	119	20	53
Cambridge	609	1,854	230	1,475	474	322	70	* 82
Norfolk	1,938	2,926	460	1,448	616	620	110	114
Suffolk	1,948	2 403	415	870	339	473	70	204
Essex	1,432	1,663	295	526	751	1,263	180	692
Middlesex (extra Metrop.)	498	520	95	117	687	1,008	150	471
London	16,979	21,565	3,655	8,241	18,6:0	23,262	3,720	8,382
Hertford	506	703	115	312	391	472	75	156
Bedford	508	857	130	479	239	291	45	97
Buckingham	959	1,344	220	605	294	611	80	397
Berks	764	1,004	170	410	392	508	80	196
Wilts	1,040	1,412	235	607	270	439	60	229
Somerset	2,882	3,802	635	1,555	718	1,141	165	588
Devon	4,070	5,108	875	1,913	981	2,485	310	1,814
Cornwall	1,678	2,156	365	843	240	397	55	212
Dorset	789	1,036	170	417	278	501	70	293
Hants	2,192	2,663	460	931	1,488	3,516	445	2,473
Surrey (extra Metrop.)	757	1,054	170	467	} 2,252	4,367	585	2,690
Kent do. do.	2,881	3.294	585	998				
Sussex	1,103	1,506	250	653	832	1,433	200	801
	74,181	101.294	16,660	43,773	46,536	67,510	10,110	31,084
Islands in British Seas	5,849	6,348	1,165	1,664	..	..	..	..
Scotland	31,061	42,656	7,000	18,595	..	..	..	..
Ireland	214,218	245,933	52,900	84,615	..	..	..	..
Brit. Colonies & E. Indies	3,291	5,498	850	3.057	..	..	..	..
Foreign Parts	8,028	13,559	2,000	7,531	..	..	..	..
Born at Sea	400	476	85	161	..	..	..	..
	262,847	314,470	64,000	115,623	..	.	..	88,132
Totals	..	..	..	243,868	..	..	..	133,836

* These natives of Lancashire and Cheshire would seem to have returned from Cambridgeshire.

TABLE XV.

	Estimated Births registered April, 1856 to April, 1861.	Estimated deaths among the same children.	Living in April, 1861 (except unregistered births).	Living according to the Census.	Rectified Number living.*	Probable number of unregistered Births.	
						Number.	Per cent.
Ulverston	6,306	912	5,394	5,354	5,479	85	1·3
Lancaster	5,829	851	4,978	4,825	4,937	— 41	..
Garstang	2,029	260	1,769	1,757	1,798	29	1·4
Fylde	3,847	650	3,197	3 344	3,422	225	5·8
Clitheroe	3,149	498	2,651	2,631	2,693	42	1·3
Northern Region	21,160	3,171	17,989	17,911	18,329	340	1·6
Burnley	13,004	2,982	10,022	10,397	10,639	617	4·7
Haslingden	11,805	2,633	9,172	9,447	9,667	495	4·2
Blackburn	22,610	5,653	16,957	17,669	18,081	1,124	5·0
Preston	20,199	5,368	14,831	14,904	15,252	421	2·1
Chorley	7,310	1,452	5,858	5,859	5,996	138	1·9
Wigan	19,170	4,905	14,265	14,451	14,788	523	2·7
Leigh	7,069	1,623	5,446	5,265	5,388	— 58	..
Bolton	25,623	6,192	19,431	18,341	18,769	— 662	..
Bury	17,064	3,765	13,299	13 339	13,650	351	2·1
Rochdale	14,857	3,385	11,472	11,813	12,089	617	4·2
Oldham	19,909	5,076	14,833	15,332	15.690	857	4·3
Ashton-under-Lyne	23,506	6,247	17,259	17,421	17,827	568	2·4
Barton-upon-Irwell	6,206	1,226	4,980	5,094	5,213	233	3 8
Manchester	41,904	12,780	32,124	32,697	33,460	1,336	3·0
Salford	18,455	4,773	14,182	14,525	14,864	682	3·6
Choriton	29,510	6,761	22.749	23,306	23,850	1,101	3·7
Stockport	16,122	3,922	12,200	11,768	12,043	— 157	..
Macclesfield	10,211	2,231	7,980	7,587	7,764	— 216	..
Eastern Region	328,034	80,974	247,060	249,215	255,030	7,970	2·4
Ormskirk	7,483	1,288	6,195	6,443	6,593	398	5·3
Prescot	14,427	2,887	11,540	11 817	12.093	553	3 8
West Derby	37,543	8,542	29,001	32,738	33,502	4,501	12·0
Liverpool	44,879	15,426	29,453	34,838	35,651	6,198	13·8
Birkenhead, Wirral	13,670	2,670	11,000	8,752 / 2,479	8,956 / 2,537	493	3·6
Western Region	118,002	30,813	87,189	97,067	99,332	12,143	10·3
Warrington	8,714	1,848	6,866	6,813	6,972	106	1·2
Runcorn	4,781	838	3,943	3,840	3,930	— 13	..
Altrincham	6,280	1,062	5,218	5,329	5,453	235	3·7
Congleton	5,877	1,261	4,616	4,896	4,805	189	3·2
Northwich	6,250	1,142	5,108	4,936	5,051	— 57	..
Nantwich	7,116	1,336	5,780	5,860	5,997	217	3·0
Great Boughton	8,871	1,644	7,227	7,574	7,751	524	5·9
Southern Region	47,889	9,131	38,758	39,048	39,959	1,201	2·5
Grand Totals	†515,085	124,089	390,996	403,241	412,650	21,654	4 2

* The Census number plus 2½ per cent. The negative number of unregistered births in Lancaster and other districts shews that this allowance is probably in those cases inadequate.

† Births 1856 to 1860 plus the difference between births in first quarter of 1856 and the same quarter of 1861, viz., 1,050.

TABLE XVI.—MOVEMENT OF POPULATION (NETT IMMIGRATION OR EMIGRATION) ASSUMING THE UNREGISTERED BIRTHS TO HAVE BEEN 75,000 IN 1841–50, AND 50,000 IN 1851–60.

	Probable Movement 1841–51.				Probable Movement 1851–61.				Probable Immigration in 1851–61.	
	Immigration.		Emigration.		Immigration.		Emigration.			
	Males	Females	Males	Fem.	Males	Females	Males	Fem.	From Ireland, Sc'tland &c., (not incl. Islands)	From Counties beyond the 50 mile limit.
Ulverston	..	..	298	557	..	..	188	98	486	491
Lancaster	..	..	2 066	1,530	..	..	1,733	1,572	402	311
Garstang	..	..	1,188	977	..	..	1,091	1,020	* 13	37
Fylde	..	..	1,720	670	..	593	189	..	1,039	387
Clitheroe	..	..	1,797	1,859	..	..	2,249	1,631	178	38
Northern Region	..	..	7,069	5,593	..	..	5,470	3,926	2,092	1,364
Burnley	..	..	658	460	..	1,325	243	..	1,214	619
Haslingden	77	380	..	..	3,976	5,566	..	..	2,740	1,809
Blackburn	..	577	98	..	4,481	7,323	..	..	5,171	724
Preston	3,594	4,828	..	..	..	2,758	1,226	..	4,146	1,361
Chorley	..	..	4,152	3,256	..	..	1,675	515	521	209
Wigan	1,513	428	..	..	1,388	905	..	..	3,318	994
Leigh	..	150	180	..	..	476	390	..	1,143	271
Bolton	1	836	..	..	..	174	2,405	..	3,039	615
Bury	..	..	1,289	357	..	264	1,483	..	2,469	549
Rochdale	204	729	..	..	3,048	4,826	..	..	3,269	1,263
Oldham	568	1,111	..	..	4,309	5,035	..	..	4,339	1,004
Ashton-under-Lyne	1,115	1,530	..	..	..	2,810	1,850	..	3,380	736
Barton-upon-Irwell									992	759
Manchester	25,976	33,930	..	..	5,149	17,324	..	..	6,835	3,571
Salford									4,569	1,593
Chorlton									8,432	6,221
Stockport	..	..	3,501	1,656	..	..	4,370	1,981	2,333	725
Macclesfield	494	1,378	..	..	..	..	5,061	2,663	* 211	281
Eastern Region	23,564	40,151	..	..	3,648	43,689	..	..	57,759	23,408
Ormskirk	..	..	1,583	1,233	..	1,502	466	..	1,041	563
Prescot	2,090	2,100	..	..	2,168	2,273	..	..	3,016	990
West Derby									15,925	7,554
Liverpool	34,015	43,639	..	..	24,274	27,429	..	..	23,084	3,044
Birkenhead and Wirral									6,032	2,532
Western Region	34,522	44,506	..	..	25,977	31,204	..	..	49,698	14,983
Warrington	..	..	854	1,471	347	161	..	..	1,226	651
Runcorn					..	..	1,413	1,597	566	344
Altrincham	..	..	729	344	..	1,199	117	..	1,070	914
Congleton	..	140	563	..	..	147	443	..	340	357
Northwich	..	..	1,416	1,123	..	..	1,699	1,422	182	244
Nantwich	..	..	415	269	..	..	703	566	226	676
Great Boughton	1,562	711	..	..	..	539	434	..	797	1,004
Southern Region	..	..	2,415	2,356	..	..	4,462	1,541	4,417	4,190
Grand Totals	48,702	76,708	..	..	19,693	69,424	..	..	113,966	43,845

* These two figures represent Emigration in excess of Immigration.

TABLE XVII.—CIVIL CONDITION OF ADULT POPULATION IN 1861.

Registration Districts.	Per centage of Males aged 20 yrs. and upwards who were			Per centage of Females aged 20 years and upwards who were			Number of Adult Females to 100 Adult Males in similar condition.			
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Total living.	Unmarried.	Married.	Widowed.
Ulverston	33·2	59·2	7·6	26·3	61·1	12·7	96·3	76·1	99·4	161·1
Lancaster	31·6	60·5	7·7	31·2	55 4	13·4	109 9	108 1	100·6	190·4
Garstang	34·3	57·5	8·2	29·1	60·9	9·9	93 2	79·2	98·7	113·7
Fylde	29·0	63·6	7·4	34·1	54 6	11 3	119·3	140·2	102.4	182·1
Clitheroe	33·7	57·4	8·9	30 5	57·2	12·3	100·1	90·7	99·7	138·9
Northern Region	32·2	59·9	7 9	30 2	57·5	12·3	104·5	98·1	100 3	163·4
Burnley	26 7	66 2	7·1	26·4	62 9	10·7	105·7	104·6	100·4	158·6
Haslingden	25·8	67·4	6·7	25·9	63·3	10 8	106 5	106·7	100·0	170·2
Blackburn	25·0	68·6	6·5	26·1	63 5	10 4	108·9	114·9	100·8	174·9
Preston	27·0	65·7	7·3	31·6	56·2	12·2	120 2	140·6	103·8	202·4
Chorley	29·0	62·3	8·7	29·8	60·1	10·1	104·4	107·4	100·9	120·3
Wigan	28·7	64·5	6·8	24·0	64·2	11·8	99·1	82·8	98 7	173·1
Leigh	26·0	65·7	8·3	28·1	60·4	11·5	110·1	119 3	101·3	151·7
Bolton	25·8	67·5	6·8	26·8	60 7	12·5	112·3	116·6	101·1	207·8
Bury	27·1	66·0	6·8	28·0	60·5	11 5	110·1	113·6	101·0	184·7
Rochdale	26·8	66 7	6·5	26·8	61·5	11·7	109·1	108·9	100·7	195·6
Oldham	25 6	68·0	6·4	23·8	64 8	11·4	105·9	98·2	100 9	186 4
Manchester	25·9	67·8	6·4	26·6	57·9	15·4	117·9	121·3	100·8	286·8
Salford	25·8	66·5	5·7	28·5	58·1	13·3	120·2	132·8	101·9	262·0
Chorlton	27 3	67·2	5·4	29·8	56·9	13·3	120·1	130 8	101·6	295·4
Barton-upon-Irwell	28·1	64·5	7·4	32·8	54·5	12·6	119·5	139·5	100·9	205·0
Ashton-under-Lyne	23·7	69 8	6·5	27·9	59·6	12·5	120·4	141·6	102·8	233·7
Stockport	23·7	68·7	7 6	28·9	57·9	13·2	122·7	149·5	103 4	213·9
Macclesfield	26 0	65·5	8 5	30·1	57 6	12·3	116·1	134·4	102·1	167·6
Eastern Region	26·1	67 2	6·7	27·7	59·8	12·5	113·8	120·3	101·3	213·5
Ormskirk	31·4	61·1	7·5	33·7	54·2	12·1	114·5	123·2	101·5	184·0
Prescot	29·1	64·9	6·0	29·9	56·0	11·1	97·6	76·8	99·1	181·4
West Derby	26·8	67·4	5·8	28·6	57 5	14·0	122·3	130·2	104·3	296·0
Liverpool	32·0	62·2	5·8	24 5	58·9	16·5	106·4	81·9	100·7	302·5
Birkenhead	31·3	64·2	4·5	29·5	58·6	12·0	109·8	103·6	100·0	292·5
Wirral	28·7	64 7	6·6	32·9	55·2	11·9	118·3	135·3	100·9	215·4
Western Region	29 9	64·2	5·8	27·0	58·6	14·4	111·4	100 5	101·7	274·9
Warrington	28·4	65 7	5·9	24·0	64·3	11·7	101·4	85 7	99·2	200·6
Runcorn	29 6	63 9	6·5	21·3	65·8	12·9	95·4	68·8	98·1	189·0
Altrincham	32·1	60·2	7·7	34·5	53 7	11·8	112·3	120·6	100 2	172·1
Congleton	25·1	67·3	7 6	25 6	63·3	11 1	106·5	108·4	100 2	155·1
Northwich	24·9	67·1	8·0	21·0	67·2	11·8	101·3	85·2	101·5	150·3
Nantwich	27·3	65·8	6·9	23·8	65·9	10 3	98·5	86·2	98·6	146·7
Great Boughton	29·2	63·5	7·3	29·6	56·7	13·8	111·3	112·9	99·3	208·7
Southern Region	28·2	64·6	7·1	26·4	61·5	12 0	104·6	98·0	99·6	176·3
North Western Division	27·5	65·9	6·6	27·5	59 6	12·9	111·9	111·5	101·2	220·0

TABLE XVIII.—CIVIL CONDITION. PROPORTIONS OF UNMARRIED, MARRIED & WIDOWED PERSONS TO 1000 HUSBANDS & WIVES OF ALL AGES.

	Males and Females aged 20 yrs. & upwards	Males aged 20–35.			Females aged 20–35.			Males aged 35–45.			Females aged 35–45.			Males aged 45 and upwards.			Females aged 45 and upwards.		
		Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
Ulverston	1657	201	152	4	144	184	5	33	142	8	26	138	11	46	206	52	44	175	87
Lancaster	1724	174	142	4	182	176	6	39	140	7	40	134	15	48	216	52	60	190	100
Garstang	1687	194	136	3	167	170	4	46	133	6	32	129	6	60	231	62	39	197	71
Fylde	1697	153	143	1	217	174	6	30	137	7	44	139	14	42	211	50	54	191	85
Clitheroe	1744	194	141	3	175	172	5	43	135	10	42	130	9	57	223	64	49	196	94
Northern Region	1700	182	145	3	176	176	5	37	138	8	37	135	12	49	215	54	51	188	90
Burnley	1537	151	191	5	161	209	7	25	135	8	25	137	12	23	170	40	23	151	65
Haslingden	1524	152	197	4	161	214	7	21	136	6	24	138	13	18	165	40	19	145	65
Blackburn	1507	141	205	5	163	225	6	20	134	6	23	132	13	19	155	35	20	142	63
Preston	1640	155	184	4	213	214	9	22	129	7	35	132	18	24	176	43	34	158	82
Chorley	1627	158	166	4	176	188	6	29	130	7	35	132	10	44	200	59	37	180	68
Wigan	1543	171	195	4	138	217	7	26	140	6	22	134	14	26	165	42	24	142	69
Leigh	1580	145	179	4	165	205	8	20	134	8	31	135	13	30	181	51	37	161	74
Bolton	1557	146	188	3	170	215	8	20	136	6	27	136	14	24	171	40	24	150	81
Bury	1578	160	179	5	179	204	7	22	139	6	29	141	13	22	177	40	23	155	75
Rochdale	1556	153	190	4	172	212	7	24	140	6	26	139	15	22	167	39	19	147	73
Oldham	1499	150	199	5	145	224	7	19	137	6	21	135	13	17	159	35	17	140	68
Manchester	1590	150	190	4	179	227	12	20	140	7	27	139	24	19	164	35	23	132	97
Salford	1581	154	192	4	190	230	11	18	140	6	30	135	20	13	160	31	25	136	85
Choriton	1614	172	195	4	204	230	11	16	146	7	33	142	20	13	152	29	26	129	86
Barton-upon-Irwell	1684	164	169	4	225	199	10	23	136	5	40	134	19	28	190	47	36	167	88
Ashton-under-Lyne	1548	134	188	5	182	215	9	17	135	6	29	138	18	16	167	34	24	150	80
Stockport	1582	131	178	4	193	212	8	18	132	7	32	135	17	19	178	43	27	157	90
Macclesfield	1625	139	146	4	190	184	7	28	143	7	38	141	14	29	203	53	34	177	86
Eastern Region	1572	151	188	4	178	217	9	21	138	7	28	137	17	20	168	38	25	146	80
Ormskirk	1735	188	161	4	219	189	8	33	131	8	44	134	15	32	203	49	50	179	89
Prescot	1519	175	199	4	198	227	7	26	139	7	21	132	14	23	160	34	22	137	63
West Derby	1607	161	178	4	193	235	12	19	151	8	30	146	21	14	158	30	30	128	90
Liverpool	1641	202	178	4	163	237	17	30	154	9	23	145	29	22	163	34	22	116	94
Birkenhead	1622	202	184	4	195	228	10	24	159	7	29	149	17	15	155	24	26	120	74
Wirral	1672	169	148	3	223	183	9	25	139	4	38	138	15	26	209	43	37	179	84
Western Region	1622	184	179	4	176	230	13	26	150	8	27	143	23	20	164	33	27	127	87
Warrington	1528	166	199	4	136	226	7	24	141	6	22	135	14	26	158	35	26	133	69
Runcorn	1532	180	173	4	119	196	7	23	133	7	19	128	10	29	195	40	21	168	80
Altrincham	1756	192	149	3	231	184	7	34	143	7	43	137	13	40	205	53	46	177	90
Congleton	1523	135	170	5	153	202	6	23	135	6	24	132	10	27	191	45	24	164	71
Northwich	1479	139	165	5	118	197	5	21	125	6	17	128	9	23	202	48	21	176	73
Nantwich	1510	158	165	4	136	189	4	22	130	5	28	131	8	28	201	43	22	174	66
Great Boughton	1602	170	157	3	182	184	7	28	138	7	38	134	15	31	205	48	44	178	99
Northern Region	1627	164	168	4	150	197	6	25	136	6	26	133	12	20	194	45	31	167	79

TABLE XIX.—POPULATION OF EACH SEX AT THE HIGHER AGES TO EVERY 100 CHILDREN UNDER TEN YEARS OF AGE IN 1861.

Registration Districts.	Males.					Females.					Total Population all ages.
	10–25	25–40	40–55	55–65	65 and upw.	10–25	25–40	40–55	55–65	65 and upw.	
Ulverstone	51·4	36·0	25·2	10·1	8·3	47·3	34·3	24·0	9·4	9·9	355·6
Lancaster	54·5	36·2	29·0	12·0	9·2	54·8	40·3	29·8	12·8	11·5	390·1
Garstang	57·5	35·5	27·0	14·1	12·1	51·9	37·2	22·5	11·5	11·1	380·4
Fylde	58·8	33·8	28·2	11·5	9·8	63·6	42·6	31·0	11·7	10·9	401·7
Clitheroe	64·5	41·3	31·0	14·7	12·1	59·1	42·8	30·4	13·9	12·6	422·4
Northern Region	56·1	36·3	27·8	11·9	9·8	54 6	39·0	27·7	11·6	11·0	385·8
Burnley	59·7	40·3	25·9	9·7	6·0	62·4	43·2	26·9	9·7	6·3	389·9
Haslingden	61·8	41·6	27·0	9 6	5·3	67·0	44·6	27·9	9·7	5·8	400·4
Blackburn	56·8	38·6	23·8	8·5	5·0	62·3	42·7	24·9	9·0	5·4	377·0
Preston	60·2	38·7	25·8	10·3	7·0	66·1	48·1	30·3	11·4	7·4	407·2
Chorley	56·4	34·7	26·6	11·8	8·1	60·4	38·6	26·4	10·6	7·8	391·4
Wigan	57·2	38·1	23·7	8·8	5·5	54·8	37 3	23·5	8·7	6·1	363·8
Leigh	54·3	38·1	25·8	11·0	7·8	62·8	42·4	27 5	10·9	8·6	389·1
Bolton	56·3	38·2	25·4	9·6	5·8	60 9	43·8	27·1	10 2	7 0	384·2
Bury	60 3	40·7	27·5	10·0	6·4	64·0	46·5	28·9	10·5	7·2	402 0
Rochdale	62·2	43·6	28·3	10·2	6·3	66·7	48·8	29·6	10·6	7·0	413·6
Oldham	59·8	43·5	26·7	9·3	5·3	61·0	46·4	27·9	10 0	5·9	395·8
Manchester	56 9	44·0	29·0	9·6	4·8	63·9	51·6	32·4	11·1	6·5	409·6
Salford	56 0	42·8	26·8	8·9	4·1	65·4	51·1	30·7	10·9	6·1	404·8
Chorlton	57·2	44·5	25·8	8·1	3·7	62·9	52·0	30·3	10·2	5·6	400·3
Barton-upon-Irwell	58·3	38·4	26·7	10·9	7·4	66·8	47·6	30·3	11·3	8·5	406·3
Ashton-under-Lyne	60·8	41·9	28·5	9·8	5·2	69·3	51·0	33·9	11·4	6·5	417·4
Stockport	60·2	40·5	29 3	11·4	6·7	70·4	51·3	34·0	12·7	7·4	423·8
Macclesfield	56·3	40·3	31·8	13·3	8·7	64 7	49·4	34·1	12·8	9·7	421·2
Eastern Region	58·5	41·2	26 9	9 7	5·6	64·0	47·3	29·4	10·6	6·6	399·8
Ormskirk	54·7	35·6	24·4	10·8	7·6	59·0	41·2	27·3	11·7	8·9	381·3
Prescot	51·5	38·2	23·2	7·6	4·2	49·2	37·1	21·7	7·8	5·3	345·7
West Derby	50·6	39·8	26·0	7·4	3·7	58·6	48·9	26·4	9·6	5·9	378·9
Liverpool	61·7	50·7	34·4	9·6	3·9	63·2	54·2	34·5	10·3	5·7	428·3
Birkenhead	54·1	43·5	26 2	6·9	3·1	57·9	47·6	26·9	8 2	4·9	379·2
Wirral	56 5	35·6	25·6	10·0	8·1	62·5	42·7	28·2	11·0	9·2	389·2
Western Region	55·4	43·4	28·5	8·5	4·2	59·2	48 6	29·5	9·7	6·0	393·0
Warrington	52·7	36·8	23·5	8·3	5·2	51 3	38·8	22·5	8·7	6·7	356·5
Runcorn	59·2	40·0	26·0	11·0	7·4	50·6	37·1	25·2	10·9	8·9	376·2
Altrincham	55·5	36·6	28·0	12·6	8·5	59·7	46·4	28·6	12·7	9·5	400·2
Congleton	56 8	38·9	28 0	11·5	8·4	62 0	41·3	28·4	10·6	8·6	394·6
Northwich	50·9	35·9	24·1	11·0	8·4	49·9	35·8	24·2	10·6	9·0	359·9
Nantwich	54·8	36·1	26·7	11·2	9·1	54·1	38·9	25·1	10·6	9·7	378·3
Great Boughton	58·9	36·9	28·6	11·6	8·7	61·2	43·0	30·3	13·1	11·7	408·2
Southern Region	55·5	38·4	26·5	11·0	7·9	55·9	40·4	26·5	10·9	9·3	383·4
N. Western Division	57·3	41·2	27·3	9 6	5·7	61·6	46·6	29·1	10·4	6·9	395·8

TABLE XX.

	In the Years 1851-60 inclusive.					Actual Increase between Censuses 1851-61.		Actual compared with Natural Increase.			
								Males.		Females.	
	Marriages.	Births.	Deaths.	Excess of Births over Deaths.				Excess.	Deficiency.	Excess.	Deficiency.
				Males.	Fem.	Males.	Fem.				
Ulverstone....	2,344	11,812	6,644	2,697	2,471	2,659	2,523	..	38	52	..
Lancaster	2,814	11,638	7,976	1,860	1,812	247	390	..	1,603	..	1,422
Garstang.....	788	3,984	2,243	864	877	− 177	− 93	..	1,041	..	970
Fylde	1,574	7,475	4,499	1,536	1,440	1,497	2,183	..	39	743	..
Clitheroe.....	1,596	6,502	4,474	1,096	932	− 1,073	− 819	..	2,169	..	1,751
Northern Reg.	9,116	41,411	25,836	8,043	7,532	3,153	4,184	..	4,890	..	3,348
Burnley	6,073	25,629	16,484	4,818	4,327	5,325	6,402	507	..	2,075	..
Haslingden ..	5,541	22,101	13,486	4,499	4,116	9,075	10,282	4,576	..	6,166	..
Blackburn	10,180	42,610	27,750	7,641	7,219	13,392	15,812	5,751	..	8,593	..
Preston	10,669	39,176	28,130	5,792	5,254	5,266	8,712	..	526	3,458	..
Chorley	2,879	14,342	8,575	2,987	2,780	1,512	2,465	..	1,475	..	315
Wigan	7,695	36,296	23,067	6,559	6,670	8,697	8,325	2,138	..	1,655	..
Leigh	3,047	13,433	8,853	2,280	2,300	2,040	2,926	..	240	626	..
Bolton	11,232	50,712	32,924	8,942	8,846	6,537	9,020	..	2,405	174	..
Bury.....	7,817	34,325	21,986	6,423	5,916	5,540	6,780	..	883	864	..
Rochdale.....	8,261	29,229	19,466	4,822	4,941	8,670	10,569	3,848	..	5,628	..
Oldham	6,528	38,174	25,130	6,668	6,376	12,027	12,461	5,359	..	6,085	..
Manchester Salford..... Chorlton.... Barton-upon-Irwell	57,060	196,771	143,286	28,591	25,894	38,540	48,018	9,949	..	22,124	..
Ashton-under-Lyne.....	11,114	46,646	33,852	6,849	5,945	5,899	9,655	..	950	3,710	..
Stockport	10,142	33,286	23,643	5,360	4,283	1,390	2,762	..	3,970	..	1,521
Macclesfield ..	5,521	21,040	15,500	3,152	2,388	− 1,709	− 75	..	4,861	..	2,463
Eastern Reg.	163,759	643,770	441,132	105,383	97,255	122,201	154,114	16,818	..	56,859	..
Ormskirk	2,735	14,349	8,141	3,171	3,037	3,056	4,889	..	115	1,852	..
Prescot	4,879	26,568	15,256	5,640	5,672	8,458	8,595	2,818	..	2,923	..
West Derby Liverpool .. Birkenhead Wirral	56,156	182,086	144,034	19,409	18,643	52,183	54,572	32,774	..	35,929	..
Western Reg	63,770	223,003	167,431	28,220	27,352	63,697	68,056	35,477	..	40,704	..
Warrington....	3,948	16,384	9,581	3,398	3,405	3,945	3,766	547	..	361	..
Runcorn	1,959	9,353	5,548	1,881	1,924	568	427	..	1,313	..	1,497
Altrincham....	2,012	12,179	7,367	2,458	2,334	2,641	3,833	183	..	1,499	..
Congleton	2,610	11,118	7,566	1,952	1,600	1,789	2,027	..	163	427	..
Northwich	2,009	12,209	7,193	2,562	2,455	983	1,153	..	1,579	..	1,302
Nantwich	2,636	13,573	7,788	3,027	2,758	2,574	2,440	..	453	..	318
Gt. Boughton..	5,423	16,820	12,374	2,378	2,068	2,444	3,107	66	..	1,039	..
Southern Reg.	20,597	91,636	57,436	17,656	16,544	14,944	16,753	..	2,712	209	..
Nor. West. Div.	257,242	999,820	691,835	159,302	148,683	203,995	243,107	44,693	..	94,424	..

TABLE XXI.

Registration Districts.	Annual average proportions in 1851–60 to 1000 persons living.				Annual average proportions in 1859–63.			
	Marriages.	Births.	Deaths.	Actual increase of population.	Births to 100 women aged 20–45.	Legitimate births to 100 married women aged under 45.	Illegitimate births to 100 single women aged 15–45.*	Marriages to 100 bachelors & widowers aged 20–45.
Ulverstone	7·07	35·64	20·04	15·63	23·09	32·7	3·4	9·00
Lancaster.....	8·05	33·27	22·80	1·82	18·83	31·0	1·8	10·87
Garstang	6·27	31·72	17·86	– 2·15	20·50	31·8	2·4	8·36
Fylde	6·60	31·35	18 87	15·43	17·79	30·5	2·1	11·97
Clitheroe	7·45	30·35	20·89	– 8·83	18·73	30·7	1·8	10·15
Northern Region ..	7·24	32·88	20·51	5·83	19 84	31·4	2·3	10·11
Burnley.....	8·71	36·75	23·64	16·62	19·45	27·7	2·7	13·83
Haslingden	9·22	36·77	23 44	32·21	18·80	27·9	1·5	14·21
Blackburn	9·66	40·45	26·34	27·72	21·28	31·2	1·8	15·52
Preston.....	10·30	37·84	27·17	13 50	18·79	30·5	2·2	15·80
Chorley.....	7·25	36·14	21·61	10·02	20·66	31·7	2·6	11·21
Wigan	8·94	42·18	26·81	19·78	24·93	33·1	4·5	12·55
Leigh.....	8·65	36·14	25·14	14·10	21·47	31·3	3·2	14·06
Bolton	9·17	41·40	26·88	12·70	21·06	31·3	2·5	15·16
Bury	8·23	36·14	23·15	12·97	17·93	27·7	1·6	11·89
Rochdale	10·06	35·59	23·70	23·42	17·33	26·3	1·5	13·05
Oldham	6·59	38·55	25·38	24·73	19·24	27·1	2·0	10·93
Manchester, Salford, Chorlton, and Barton-upon-Irwell	11·09	38·23	27·65	16·62	17·34	27·1	1·6	16·08
Ashton-under-Lyne	8·75	36·74	26·66	12·25	17·34	26·7	1·6	14·73
Stockport.....	10·99	38·07	25·62	4·50	16·35	25·6	1·8	17·95
Macclesfield	8·84	33·70	24·63	– 2·86	16·70	26·3	2·4	13·25
Eastern Region	9·66	37·99	26·03	16·31	18·62	28·2	2·1	14·63
Ormskirk.....	6·47	33·94	19·26	18·79	18·58	31·7	2·2	9·65
Prescot.....	7·55	41·13	23·62	26·40	23·85	32·9	2·2	10 29
Liverpool, West Derby, Birkenhead, and Wirral	10·76	34·88	27·59	20·45	16·95	26·5	1·1	14·13
Western Region....	10·14	35·46	26·62	20·95	17·67	27·4	1·2	13·46
Warrington	9·87	40·94	23·94	19·27	22·68	31·4	2·3	13·93
Runcorn	7·45	35·57	21·10	3·78	23·28	31·4	3·0	8·91
Altrincham	5·40	32·67	19·81	17·37	16·94	29·5	1·9	7·64
Congleton.....	8·05	34·29	23·34	11·77	19·61	27·6	2·9	13·59
Northwich	6·23	37·83	22·29	6·62	23·58	30·9	3·7	11·23
Nantwich	6·78	34·68	20·02	13·04	21·70	29·5	3·4	11·24
Great Boughton.....	9·72	30·14	22·18	9·96	17·69	28·1	2·0	15·67
Southern Region ..	7·83	34·84	21·84	12·08	20·34	29·6	2·6	11·77
North Western Division	9·49	36·87	25·51	16·49	18·58	28·3	1·9	13·83
England and Wales	8·43	34·07	22·17	11·26	18·74	28·3	1·9	12·54

* Unmarried and widows.

Northern Region	5·257	4·501	·822	·868	·539	·518	·688	·813	·965	·905	1·008	1·094	1·238	1·258	1·657	1·589	2·845	2·585	6·371	5·508	14·919	13·236	26·925	
Burnley	8 405	7·174	·987	·920	·609	·525	·748	·906	·806	1·102	·807	1·251	1·083	1·317	1·678	1·542	3·233	3·499	7·528	7·485	17·305	16·245	33·846	33·7
Haslingden	8·116	6·835	·969	·918	·550	·607	·806	·952	·811	·921	·792	1·055	1·149	1·260	1·672	1·853	3·209	3·099	7·618	7·496	18·342	15·049	42·857	31·8
Blackburn	9·806	8·444	1·161	1·094	·618	·620	·898	1·045	·864	·997	·927	1·183	1·208	1·491	1·984	1·796	3·601	3·246	6·969	7·229	16·174	15·265	31·538	31·1
Preston	10·604	8·907	1·088	1·066	·615	·516	·817	1·032	1·019	·943	1·074	1·208	1·472	1·539	2·026	1·937	3·432	3·437	7·238	7·227	15·624	15·646	27·500	29·6
Chorley	6·988	5·785	·908	·755	·623	·481	·823	·843	·878	1·009	1·012	1·135	·966	1·329	1·414	1·554	2·682	2·754	6·486	6·707	14·106	13·275	20·385	29·6
Wigan	9·436	8·598	1·092	·985	·760	·556	·911	·931	1·073	·975	1·036	1·026	1·205	1·339	2·013	1·712	3·348	3·209	7·561	6·840	14·727	15·472	30·294	28·4
Leigh	9·165	7·380	1·049	·902	·596	·519	·981	·862	1·008	1·037	·943	1·281	1·149	1·376	1·725	1·655	3·233	2·584	6·971	6·696	16·304	14·634	35·714	31·4
Bolton	10·267	8·722	1·113	1·086	·612	·607	·979	·889	·941	·944	·929	1·043	1·343	1·320	2·096	1·807	3·770	3·257	8·177	6·914	17·705	15·442	30·000	29·6
Bury	8 527	7·221	·848	·797	·539	·511	·800	·847	·863	·955	·881	1·111	1·102	1·316	1 874	1·831	3·489	3·044	7·607	7·346	16·335	13 927	41·818	32·7
Rochdale	8·670	7·546	1·116	·902	·613	·547	·864	·918	·915	·995	·929	1·078	1·341	1·239	1·925	1·724	3·524	3·097	7·779	7·362	15·652	16·000	36·667	42·9
Oldham	9·985	8·321	·982	·902	·508	·505	·760	·891	·779	1·006	·842	1·125	1·244	1·342	2·246	1·727	3·970	3·458	8·418	7·764	16·360	16·235	34·286	26·5
Manchester	12·380	11·070	1·277	1·220	·575	·560	·843	·785	1 014	·949	1·293	1·229	2·035	1·737	3·170	2·716	5·266	4·476	10·066	8·420	19·528	16·607	44·255	30·7
Salford	10·327	9·190	1·158	1·045	·538	·491	·639	·643	·746	·706	·905	·885	1·516	1·409	2·384	2·054	4·608	3·557	8·386	7·551	19·604	16·519	34·211	37·2
Chorlton	9·497	8·210	·997	1·051	·463	·410	·739	·671	·729	·702	·874	·976	1·275	1·341	2·236	2·070	4·114	3·616	8·404	7·311	15·774	16·308	30·769	34·7
Barton-upon-Irwell	7·294	6·448	1·029	·870	·535	·621	·699	·774	·906	·879	·920	1·063	1·407	1·315	1 770	1·720	3·294	3·108	6·807	6·303	15·970	14·190	27·500	35·0
Ashton-under-Lyne	10·538	9 146	1·164	1·098	·635	·566	·973	1·005	1·006	1·040	·987	1·226	1·281	1·510	2·217	1·815	3·969	3·610	8·865	7·878	18·119	17·287	37·826	35·1
Stockport	9·996	8·768	·957	·865	·516	·553	·892	·904	·943	·962	·887	1·130	1·286	1·305	2·135	1·998	3·975	3·826	8 335	8·333	16·884	16·561	35·161	29·5
Macclesfield	8·676	7·113	·899	·888	·719	·690	·945	1·347	1·009	1·228	·987	1·308	1·094	1·483	1·870	1·901	3 559	3·405	7·635	7·890	14·739	15·174	34·194	32·3
Eastern Region	9 873	8·543	1·074	1·008	·586	·546	·843	·889	·908	·943	·977	1·126	1·377	1·430	2·191	1·971	3·880	3·513	8·058	7·511	16·753	15·719	33·466	31·7
Ormskirk	5·724	5·125	·845	·785	·400	·381	·574	·744	·850	·728	·919	·886	1·157	1·173	1·647	1·439	2·719	2·332	5·844	4·786	13·946	13·176	32·069	22·2
Prescot	7·631	6·843	1·067	·920	·613	·516	·740	·654	·922	·946	1·036	·953	1·444	1·397	2·014	1·731	3·793	3·071	7·456	7·321	16·120	14·568	28·824	23·0
West Derby	8·290	7·412	·993	·959	·513	·461	·601	·538	·819	·613	·906	·901	1·314	1·357	2·084	1·831	3 879	2·984	7·752	6·496	16·263	14·320	31·818	31·2
Liverpool	13 741	12·654	1·457	1·433	·583	·595	·895	·716	1·187	·948	1·596	1·373	2·294	1·877	3·311	2 686	5·350	4·647	10·635	8·509	19·847	15·686	28·333	29·2
Birkenh'd & Wirral	6 617	5·792	·836	·827	·503	·492	·655	·525	·623	·532	·801	·758	1·295	1·138	1·837	1·436	3·204	2·652	7·171	5·798	14 000	12·581	44·706	25·1
Western Region	9·933	9·016	1·150	1·107	·543	·517	·718	·636	·981	·787	1·223	1·093	1·764	1·558	2·582	2·124	4·318	3·574	8·468	7·084	16·769	14·514	31·739	27·4
Warrington	7·981	7·219	·781	·797	·516	·450	·709	·656	·846	·910	·951	1·021	1 407	1·321	2·251	1·891	3·580	3·041	7·711	6·577	18·623	12·995	25·789	34·5
Runcorn	6·387	5·622	·939	·870	·552	·564	·544	·655	·736	·885	·946	1·129	1·185	1·250	1·826	1·737	3·256	2·683	6·722	5·455	15·203	11·788	30·000	34·7
Altrincham	5·948	4·807	·773	·611	·452	·483	·676	·765	·776	·849	·834	1·085	1 301	1·161	1·616	1·507	2·888	2·029	6·284	5·982	15·959	15·639	28·571	37·0
Congleton	7·236	6·291	·944	1·011	·739	·761	·885	1·120	1·054	1·228	·811	1·214	1·020	1·471	1·438	1·509	3·221	3 003	6·744	7·013	16·014	14·643	30·000	33·9
Northwich	7·458	6 660	·810	·777	·571	·508	·708	·717	·857	1·026	·869	1·280	1·189	1·132	1·339	1·457	2·836	2·271	6·050	6·494	15·150	12·642	34·211	32·3
Nantwich	6·214	5·333	·761	·912	·499	·508	·586	·619	·662	·849	·684	·988	·935	1 032	1·161	1·286	2·313	2 225	5·827	6·079	13·801	12·218	32·286	22·7
Great Boughton	6·383	5·631	·843	·833	·444	·496	·661	·632	1·060	·904	1·127	1·119	1·504	1·293	2·293	1·659	3·333	2·952	7·121	5·621	14 789	13·014	31·000	25·9
Southern Region	6·803	5 818	·830	·826	·527	·544	·680	·732	·866	·945	·904	1·110	1·246	1·239	1·748	1·581	3·055	2·703	6·625	6·116	15·399	13·239	30·440	29·4
Nth. Western Div.	9·366	8·203	1·054	1·005	·566	·536	·792	·816	·923	·908	1·033	1·114	1·455	1·437	2·210	1·950	3·809	3·386	7·803	7·101	16·338	14·878	31·828	29·9
England & Wales	7·911	6 971	·871	·847	·488	·500	·699	·738	·869	·851	·967	·999	1·248	1·215	1·700	1·520	3·085	2·701	6·539	5·866	14·667	13 434	31·008	28·9

NOTICE OF A MEDIÆVAL SIGNACULUM OF THE ANGLO-SAXON SAINTS, EDWYN AND ECGWYN.

By Henry Ecroyd Smith.

(Read 25th February, 1869.)

Since the Reformation of our national Church in the 16th century, and the consequent abolition of the fasts and anniversary days of most of its earlier saints, these anniversaries have lapsed into general oblivion. In a very limited number of instances "offices" were continued in reference to such as still retained a strong hold upon the veneration of the commonalty; but in nine cases out of ten, it is to the *Old English Calendar*,* or Chambers's *Book of Days*, the student must turn, even for such names as Edwyn and Ecgwin, which represent men, not merely famous in the annals of the Church, but held for many centuries in the greatest esteem and reverence throughout the land, and most deservedly so as regards Edwyn, one of the first Christian Sovereigns in England.

These saints, the one fourth King of Northumbria, and the other third Bishop of Worcester, lived nearly half a century apart, yet there would appear to have been some connection between them, apart from their respective positions as kingly patron and high dignitary in the church, inasmuch as a relic has been found,—and in this very county, though as yet unpublished,—in which the two are introduced into an association so close, as rarely to be encountered save in cases of contemporary lives.

* It will be found in the *Catholic Almanack* for 1687, and in old *Manuals*, 1706 and 1721; also in the *Paradise of the Soul*, 1720; *Emblems of Saints*, second edition, 1860, by F. C. Husenbeth, D.D., who reprints it, but publishes no emblem or symbol of either saint in question, such being then unknown in art.

About the month of August, 1863, a lady-neighbour of mine, accompanied by her son and some young friends, was "naturalising" in the deeply-worn gully of a rivulet, when a very *un*-natural appearance for a while distracted her attention from ferns and wildling flowers and other gems of earth. The brook, through long drought, had almost run itself dry, and upon crossing it by some large stones, between two of these an anomalous object appeared, protruding. Upon extraction from this place of lengthened confinement it was covered by muddy oxidation, yet the finder was confident something uncommon lay beneath, and the skittish jokes of the young ladies upon the remains of a *child's tin plate*, bought at a fair, fortunately passed unheeded. The streamlet scarcely exceeds half a mile in length and debouches into the Ribble, at one of its numerous northern bends (N.W. of Balderstone Hall, on the opposite or southern bank) after running through a portion of the Elston district, about half-way between Ribchester and Preston. The locality, owing to its peculiar geographical position and the marshy character of the ground, is one of the most secluded from the "busy haunts of men" that can well be imagined for a valley in populous mid-Lancashire—lying quite out of the track of travellers and railway navvies—and the nearest road being several miles distant. Nevertheless, near the mouth of the brook, a *ford* across the Ribble existed in *former* times, and the fact is of importance in connection with the probable loss of the relic from the person of some pilgrim or other mediæval traveller.

When cleaned, the object not only displayed a singular shape, but effigies, symbols, and inscriptions, which caused it to be submitted to the inspection of several local antiquaries; though beyond a short descriptive paragraph in the *Preston Chronicle*, no further attention was called to a truly historic relic, which I venture to claim as one of the most interesting

and novel of its, at all times, very curious class of remains, which has ever been discovered in our land.

The religious *signacula* of the middle ages—commonly designated "*pilgrims' signs*"—were manufactured by the monkish custodians of the numerous shrines of the Virgin and other Saints of repute, and sold to the innumerable devotees and other visitors who flocked thereto. They were cast in pewter or lead (apparently for cheapness, the real seals with few exceptions being produced in *latten*) and in various shapes, but were invariably provided with loops for suspension to the *hat* or other portion of the dress. So abundantly were these tokens purchased in the superstitious times in question that even Royal pilgrims were accustomed to return like the one described in the *Vision of Piers Ploughman*,—

"A bolle and a bagge	(bottle and bag)
He bar by his syde	(bore)
And hundred of *ampulles*	(ampullæ)
On his hat seten	(set or seated)
Signes of Synay	(Sinai)
And shelles of Galice	(Galilee)
And many a crouche on his cloke	(cruise, or water bott'e)
And keyes of Rome	
And the vernycle before	
For men sholde knowe	
And *se bi hise signes*	
Whom he sought hadde." *	

Most of the published examples of which we have any authentic account have been found during the dredging of some piece of water—river, stream, or lake—and the sedimentary deposit into which they have sunk or from other causes become covered by, has generally proved an important element in their preservation.

The *Ampulla* was a particular and comparatively rare form of these signs, manipulated in imitation of the bottle-shaped vessel—the *Ampoulle*—likewise made of pewter, in which was stored the *Chrism* or holy balsamic oil, consecrated for use in

* Wright's Ed.

some of the most important rites of the Church, as baptism and extreme unction—hence the later name of *Chrismatory*. The French name *ampoulle*, or the Latin *ampulla*, was commonly applied to the sign—more or less a fac-simile in miniature, which being formed hollow, was supplied, at the cost of a considerable benefaction to the priest, with a drop or two of the sacred balsam. One of the outer surfaces usually displays an effigy of the saint at whose shrine the sign has been purchased, the other occasionally remaining plain, but more frequently it bears a religious symbol or emblem. Mr. J. G. Nichols, in his *Pilgrimages to St. Mary of Walsingham and St. Thomas of Canterbury*,* incidentally remarks:—"The "pilgrims' 'ampulles' were probably brought from Rheims, "where the kings of France were usually crowned and "anointed from the *sainte ampoulle* there preserved." This opinion we cannot entertain, for though, as stated, this class of the religious *insignia* are rare in proportion to others, yet they have been found in all parts of Britain, and so diversely formed, that no doubt can be reasonably entertained of their insular fabrication, and two of the best proofs of this reproduction are our example from the Ribble, and the next in point of size, which, preserved in the rich museum of local antiquities at York, is said to have been dredged from the bed of the Ouse, and bears the head of St. Thomas à Becket.† Philip de Commines, speaking of the deathbed of Louis XI, says,‡—"The holy vial of Rheims, which had never been "removed before, was brought to his Chamber at Plessis, and "stood when he died upon the head of his cupboard; for he "intended to be anointed with it again, as he had been at his "coronation. Some were of opinion that he intended to have "anointed himself all over; but that was not likely, for the "vial was but small, and no great store of oil in it. I saw it "myself at the time I speak of."

* Westminster, 8vo, 1849. † *Coll. Antiqua*, II, 48. ‡ *Ibid.*

AMPULLA OF PEWTER (DATE TWELFTH CENTURY) FOUND IN LANCASHIRE.
A RELIGIOUS SIGNACULUM OF THE ANGLO-SAXON SAINTS EDWYN AND ECGWYN.

The sign before us is an ampulla of the largest size hitherto found, being three inches in width, and originally measuring from four to five inches in height; but the upper portion is fractured and one of the lateral loops is wanting. The perfect unity and congruity of the whole character of this relic forbids any doubt as to its *genuineness*,—a remark unfortunately necessary in these days of false objects, mostly *not forgeries*, but monstrous; they are absurdly designed and inscribed articles in lead or tap-metal, which, by some means difficult to ascertain, have been scattered by the London manufacturers over the length and breadth of the country.* Our example also dates from as early a period—say the twelfth century—as any described or illustrated by our honorary member, Mr. Roach Smith; for it is to that indefatigable antiquary that the archæological world is indebted for the recognition of and first dissertations upon, this class of mediæval relics.†

It bears an effigy upon either face, and but for priority of existence in the saints, opinions might have differed as to which claimed the honour of the obverse. Giving this tc the martyr-king, we find Edwyn—sometimes styled *the Great*—fourth king of Northumbria, crowned and enthroned, with a sceptre held in the right hand and leaning upon the shoulder, and a sword in the left, whilst flowered draperies complement the configuration. The inscription—carried round the ampulla, almost from loop to loop—is composed chiefly of Roman characters of large size, and reads—"SIGILLVM . SANCTI . EDWINI . REGIS . P . MARTIRIS."* (The sign of Saint Edwyn, King and Protomartyr.) The reverse represents Egwyn, one of the earliest Bishops of Worcester, and the founder of Evesham Abbey. He appears

* No *forgeries of pilgrims' signs* have as yet been recognised, a result occasioned, doubtlessly, through the inability of procuring examples; hence the *invented* types referred to.

† *Coll. Antiqua*, I, p. 81, *et seq.*; II, p. 43, *et seq.*; IV, p. 165, *et seq.*—each notice being well illustrated with numerous examples, English and Continental. The examples first exhibited were dredged from the Stour, at Canterbury.

mitred and enthroned under a canopy, and in full canonicals, with the episcopal staff or crosier in his right hand. At his left side is a *fish*, holding in its mouth the handle of a *key*—symbols which only the extraordinary story of Egwyn's life can properly elucidate. The inscription, which is in similar characters to that on the obverse, runs—"SIGILLVM . SANCTI . "EGWINI . EPI . ET . CONFESSORIS." (The sign of Saint Ecgwyn, Bishop and Confessor.) This title of *Bishop-Confessor* appertained to every occupant of an episcopal see, is still recognised by the Roman Church, and probably dates from the institution of the rite of confession itself.

The combination of the effigies of SS. Edwyn and Ecgwyn upon this ampulla seems to bespeak the existence of a *conjoint shrine, whence it was procured*, but numerous enquiries have as yet failed to trace such a shrine, either in the Ribble district or at Evesham, where one, of the founder, would in all likelihood be erected in the Abbey-church in early times, and later would share the common fate of mediæval sanctuaries. Our own neighbourhood, it will be remembered, possessed one on Hilbre proper, which, there is reason to believe, was much frequented for centuries, and yet the merest figment of a record among the archives of St. Werburg's Abbey has reached our times: others will doubtless remain for ever unknown.

Investigation in the lower Ribble district, though failing to elicit evidence of a shrine of both or either of our saints, establishes the fact of at least *three* religious houses having been founded here during the Norman period. These are—*Penwortham Priory*,* by Warin de Busel, first Baron Penwortham, soon after the Conquest, dedicated to the Virgin Mary, and granted, with valuable lands hereabout to the Abbot and Canons of *Evesham*;† the *Hospital of St. Saviour*

* All traces of this Benedictine priory, as of the castle of Penwortham, have long since disappeared, and even the respective *sites* of these mediæval structures are matter of conjecture.

† Baines's *Lancashire*, III, 485.

of Stede, under Longridge Fell (extra-parochial)—now called the Old Chapel of Styd or Stid, and so designated, according to local tradition, through having stood (*stede*) its ground during the throes of an earthquake, when all the neighbouring buildings fell, and the course of the river, which wound quite closely by, was removed a quarter-mile to the southward; it is said to have been founded in the year 1000, and is acknowledged by Whitaker to be the oldest entire building in all Whalley; extensive foundations of a much larger structure and outbuildings, probably pertaining to a monastery of the Knights Templars, lie around;—lastly, *Whalley Abbey*, too well known to require notice here.* The whole of this tract, *i.e.*, from Penwortham on the south-west to Whalley at the north-east, is further remarkable as abounding in the names (with occasional remains) of *old crosses*, as a glance at the Ordnance map will testify. Here St. Paulinus, exiled from Northumbria in 625, laboured for six years to convert the inhabitants, and three at least of the road-side crosses are believed to have been erected in his time.†

Subsequently, this part of the county—chiefly belonging to Amounderness Hundred and attached to the see of York—was repeatedly visited, in the course of his missionary labours by St. Wilfrid, a successor of Paulinus, who died in 709, and to whom, conjointly with St. Mary, the parish church (at Ribchester) was dedicated.

Thus, a close connection is established with Evesham, as also with York, where it is but natural to conclude a shrine of its Proto-martyr, King Edwyn, was honoured in the Cathedral Church, built by Wilfrid. On the other hand, turning to the Abbey of Evesham, the historical fact is important to the argument that *St. Wilfred was present at the dedication of its Church*, and if, as it cannot be unreasonable to suppose, he had

* The registers of *Samlesbury Chapel* begin in the year 1089: it lies near the Southern bank of the Ribble.

† Baines, I, 51. "A cross formerly existed at Dewsbury in Yorkshire, commemorating the preaching of St. Paulinus in that town."

been a liberal patron of this important and costly undertaking, what is more probable, considering the customs of this era, than that, in compliment to the Archbishop, Ecgwyn here constructed a shrine of St. Edwyn? After decease, his own might be erected in juxta-position, and thus they would become conjointly honoured. When the pewter signacula came into vogue, both saints would appropriately find a place upon one of the particular signs issued here.

Wheresoever it was made, little doubt can be entertained that the ampulla was lost by some pilgrim, upon approaching or leaving the ford by which he either purposed crossing or had crossed the Ribble, on his route between Stede and Penwortham; as lower down, he could only have passed by boat. The wearer of the sign might possibly be a monkish agent of the Evesham or Penwortham establishment engaged in the collection of rental.

In further illustration of the subject, a short sketch is appended of the life of each of these saints.

Edwyn or Edwine,* Prince of Deira, was grandson to Ida, first king of Northumbria, who reigned from 547 to 559, and son to Ælla, first sovereign of Deira, the province (comprising the western portion of the county of York) being now separated from that of Bernicia, which fell to his elder brother Adda or Odda. Upon the death of his father in 588, Edwyn, though raised to the throne, was still a child, and his youth was taken advantage of by his ambitious and unscrupulous relative Athelfrid or Ethelfrith, third King of Northumbria, who had married his sister. This monarch seized the territory, and ruled the provinces with despotic power until 617. For the singular story of the escape, wanderings, and subsequent conversion to Christianity of the royal exile, we must refer to the Venerable Bede's *Ecclesiastical History*, where it

* *Eadwin* of the Saxon chronicle, and *Edwini* are the Latinized forms: in the text the true Anglo-Saxon names Edwyn and Ecgwyn are adopted.

is given in full detail; but a popular rendering of the pith of the Churchman's Latin, under the signature of a well-known writer, Mr. S. C. Hall, may be found in *The Amulet* for 1828.

It was at no inconsiderable risk that Reodwald, the Uffinga of East Anglia, at length commiserating the fugitive, sheltered him in one of his strong castles. Here Edwyn was secretly visited by a stranger—Paulinus, the missionary from Rome—who, solemnly assuring him of a speedy reinstatement into his hereditary position, obtained his promise to *give heed* to one who could bestow upon him "*better counsel—counsel more profitable for your soul's health and salvation than was heard by any of your parents or ancestors,*" when his prophecy should be fulfilled. It was not, however, until some years after the tyrant Athelfrid was killed, and his army routed by Reodwald and Edwyn, that the mysterious stranger advanced his claim. The rule of the new king had not only become consolidated, but he had completely gained the affections of his subjects throughout Northumbria by his intelligence, justice, and kindliness of heart. His reign was indeed peace. Of this remarkable period Bede (himself a a native of and resident in the kingdom) asserts that "a weak "woman might have travelled over the island* without the "least molestation."

Meanwhile, Paulinus had been busily indoctrinating other portions of England with Christian truth, and now accompanied the Kentish, but Christian, bride Ethelburga to her husband's northern home. As a natural result, not the court alone, but the people generally, received the new doctrines most favourably, and Paulinus became installed first Bishop of historic York. King Edwyn was publicly baptized by him in the first church erected in the province, and dedicated to St.

* Florence of Worcester describes Edwyn's territory "*majore potentia cunctis;*" and many writers, following suit, speak of his ruling the whole island as Britwalda.

Peter the Apostle,—which had been hastily constructed of wood for the express purpose,—and so great was the concourse of people that the interesting and imposing ceremony was prolonged *from sunrise to sunset over six and thirty days,* commencing on Easter Sunday, A.D. 627.

After a second reign of seventeen years, Penda, the pagan King of Mercia, who had long been Edwyn's secret foe, persuaded Cadwallo, the British King of Wales, to join him in an attack upon Edwyn. The combined forces met those of Edwyn at Haethfelth or *Heavens-field,* (now Hatfield Chase,) near Doncaster, and there, unfortunately, the first Christian sovereign of Northumbria lost his life, together with a vast number of his converted subjects, whence the designation of the site of this dreadful encounter, in which Penda and Cadwallo are asserted to have spared neither age nor sex. The head of King Edwyn was buried in St. Gregory's porch of the church he had nearly constructed at York, but his body was conveyed to the celebrated Abbey of Streaneshalch by Whitby, and there interred with fitting honours A.D. 633. His offices as King-Martyr and Saint were celebrated on the 4th day of October in each year.

The life-history of Bishop Ecgwyn bears a widely different complexion, but is equally noteworthy from its curious incidents, thoroughly characteristic of the times, and which are chiefly culled from his autobiography.*

* Mr. Thomas Wright, M.A., gives in his *Biog. Brit. Literaria,* I, pp. 223-9, an excellent digest of this account, from which the more interesting occurrences are extracted in the text. He appends the following note: "The life of Ecgwyn, "composed in part from his own work, is preserved in a noble MS. of the 10th "century, MS. Cotton, Nero, E. I, fol. 22 r°, 32 v°. It has one or two words "glossed in Anglo-Saxon. This life has been attributed to Berctwald, Arch- "bishop of Canterbury. It has never been printed. An abridgment of it, "written apparently in the 12th century was printed in the *Acta Sanctorum* "*Mens. Januar.*, Vol. I, p. 707, and had previously been inserted in the *Nova* "*Legenda Angliæ* of Capgrave. Bede has not mentioned Ecgwyn's name, "indeed the general information that historian gives relating to the kingdom of "Mercia is very incomplete. William of Malmsbury has a brief account of "Egwyn, *de Pontif,* p. 284. A life quoted by Godwin (de Brœsul) appears to "have differed from those just mentioned."

The date of his birth is unknown, but that he was a native of the district owning Worcester for its capital, and claimed a near relationship to the royal line of Mercia, are facts thoroughly established. A contemporary biographer, (probably Berotwald, archbishop of Canterbury,) states that even in childhood Egwyn was remarkable for pious conduct, and that in early manhood, having already become a confidante and councillor of King Ethelred, this monarch promoted him to the see of Worcester, on the death of Oftsor, A.D. 692. In common with Edwyn of Northumbria he soon experienced the dangers of his elevated position, but the bishop's enemies were private and intriguing ones. Their insinuations culminated in heavy charges, the *gravamen* of which has not transpired, but the great severity of his sacerdotal rule is supposed to have formed the original provocation. However this may have been, the sovereign at length felt bound to concur in his favourite minister's journey to Rome, at the mandate of the Pontiff, there to answer the serious accusations which had been preferred against him.

Ecgwyn was a politic man; if he could lay claim to the innocence of the dove, he likewise proved himself to possess in no small degree, the wisdom of the serpent. A great appearance of humility under the circumstances was essential to his purpose, and he forthwith proceeded to order, at a neighbouring smithy, a set of iron fetters, padlocked like what are now used to secure horses. These being attached to his bared legs, the arraigned ecclesiastic started on foot, in the most approved penitential style, having first—and this should be especially noted—locked the manacles *and cast the key into a reach of the river Avon*, still known as the "*Hrudding* "*pol.*" (pool.)

Ecgwyn and his party duly reached the coast; but walking fettered and barefoot does not seem to have exactly agreed with the penitent's constitution, for, at Dover, where probably none

but friends enjoyed his *personal* acquaintance, the pilgrims very sensibly took ship for the Italian coast. Here, disembarking from their small craft at the mouth of the Tiber, the bishop devoutly addressed his thanks to heaven for deliverance from the dangers weathered, whilst some of his companions, more sensually inclined, devoted their energies to a little amateur fishing, the result being the capture of a fine salmon, which strange to relate—though no more strange than *true*—upon being disembowelled for cooking, *was found to contain the key of the bishop's manacles!!!** The story soon got wind, as well it might, and speeding to Rome ahead of our party—just as a certain slang phrase entered London antecedently to the arrival of the wofully *foot*sore volunteers from Brighton, a few years ago—the result was quite a sensational reception in the "eternal city," the very bells of their own accord pealing loudly in welcome. The Pontiff received Ecgwyn most graciously; decided unequivocally against his traducers, and the maligned churchman, with highly recommendatory epistles, returned to Mercia, where his good friend and sovereign not only at once reinstated him in the bishopric, but placed the tutelage of the royal children under his supervision.

Later in life Ecgwyn founded—it is said upon the site of a more ancient church—and in a forest tract near Worcester called Homme or Evesham, a sumptuous abbey. The precise location was miraculously indicated, in the first instance, to the head swineherd, by three seraphic females, supposed to be the Virgin Mary and two angels—a vision repeated for the especial encouragement of Ecgwyn himself.

His own account as rendered by William of Malmsbury runs, "I Ecgwyn, the humble Bishop of Mercia, am desirous "to manifest to all the faithful in Christ, how by the inspira-

* No salmon being found in any stream connected with the Mediterranean the miracle was enhanced effectively.

"tion of the Holy Spirit and by the suggestions of many "and of real visions it was revealed to me that I should erect "an house to the honour and glory of Almighty God, the "blessed Mary, and all the elect in Christ, and to the "furtherance of my own salvation. When, therefore, in the "days of King Ethelred, I chiefly flourished in his favour, I "obtained from him a place called Haum, where the blessed "and eternal Virgin had first appeared to a shepherd named "Eoves. Afterwards she appeared likewise to me in the "same place, with two virgins attending her, and holding a "book in her hand. I set, therefore, immediately to work "and clearing the place from thorns and brambles, by the "blessing of the great God (praised be His Name), brought "my design to its deserved accomplishment. * * * * "Thus, by the blessing of God, in a short time I had col- "lected 120 manses for the aforesaid Church of Christ."*

King Ethelred died soon after the commencement of the work, but Coinred, who succeeded him on the Mercian throne, was equally well disposed to the bishop, endowing the rising monastery with rich lands on both sides of the Avon. In the year 709, the building was probably complete, for at its commencement we find Ecgwyn once more in Rome, whither he had gone for the purpose of securing a charter of privileges for the new foundation. The consecration, which occurred in the same year, was regarded as a highly-important ceremony, for not only Wilfrid of York was present as we have seen, but Archbishop Berctwald, who presided, and a large number of the inferior clergy likewise officiated.

John of Tinemouth reports strongly in favour of Ecgwyn's pastoral qualities—"This holy man, the higher he was ad- "vanced in his station, became only the more conspicuous by "his humility and other virtues. He was the father of the

* Tindale's *History and Antiquities of the Abbey and Borough of Evesham*, 1794.

" fatherless, the patron of the afflicted. His discourse to the " wicked was as a sharp sword; to the virtuous it was milk " and honey. He was resolute to the obstinate, but kind and " gentle to the meek-hearted."

" He was the author of several works, having much erudi- " tion for that age, though it is doubtful whether any of them " are still extant."*

Of the lordly Abbey, little remains except the Tower of the Church and a noble arched portal, finely sculptured with groups of figures. The late lord of the manor, Edward Rudge, Esq., F.R.S., F.S.A., excavated the foundations, 1812—1822, and a fine lectern or elevated reading desk, with four sides of richly sculptured stone was found, which is engraved and described in the *Archæologia*.† Upon it is the figure of an abbot in relief, with a crosier in the left hand, thus distinguishing a bishop, and as Ecgwyn was the only abbot of this rank, there is good reason for assuming that his effigy was intended.

Impressions of several seals used in the Monastery exist. A circular one, four inches in diameter, nearly whole, and probably dating from the 13th century, of St. Mary and St. Ecgwyn, is decidedly the most interesting. The obverse includes, in the lower part of the field, a trifoliate compartment containing a representation of the herdsman Eoves tending his swine in the forest, and inscribed—" EOVESHE . VENETIE . " AIT . WAS . SWIN . CORLIMEN . CLEPET . VIS . EOVISHOM,"— thus rendered: " Eoveshe was keeper of swine at the island Ait. The country people call this the habitation of Eoves." Above on the left are three females. The first is crowned and bears a cross-headed staff, with which she points to the church above: opposite is the bishop in canonicals, kneeling, and behind him stand two attendants. Connecting these groups is a label, inscribed, " ECCE . LOC . QVE . ELEGI." (Behold

* Tindale. † Vol. XVII, p. 278.

the place which I have chosen.) The circumscription runs— ✠ "SANCTE . MARIE . ET . SANCTI . ECGWINI . EPI . EOVES-"HAMENSIS . MONASTERII." The reverse bears several groups, under early Gothic canopies. On the left, within a Gothic niche, appears the Virgin and Child, below which a King stands handing a charter to a Bishop, which is inscribed, "DAMUS . REGIE . LIBERATI." Behind the King is a Queen, and an official bearing a hawk (?) Above is another view of the abbey-church. Circumscription, "*DICTIS . ECGWINI . . . "(UHERATRINI . OMNI) BVS . VNDE . PIE . NITET . AULA . SAC . "MARIE." Part is wanting, and though supplied as above, no wonder Tindale remarks on the difficulty of interpretation.

Dugdale in his *Monasticon** supplies variations of the above inscriptions, which are probably more correct, the first reading,—

"EOVES . HER . WENEDE . MIT . WAS . SWIN .
ECGWIN . CLEPET . VIS . EOVESHOM".

rendered, being two lines of rhyme,

"Eoves here wended with his swine,
Ecgwin named it Vic (village?) Eovesham."

The circumscription of the reverse appears as

"DICTIS . EGWINI . DAN . . . . FRATRI . RI . . . . . .
SACRAE . MARIE."

This seal has every appearance of having been copied from one of earlier fabrication.

A second seal is oval, and contains two figures, the Virgin, presenting a crosier to an Ecclesiastic, probably Ecgwyn; above appear the sun and moon; circumscription almost gone.

A third bears the Horselock from the abbey arms—(*azure*, a chain in chevron, with a ring in the dexter, and a horselock in the sinister, between three mitres labelled *or*)—between three mitres.†

* Vol. II, p. 13. † Engraved in Tanner's Plate of Abbatial Seals.

Thus both seals and arms served to perpetuate the memory of the founder, and some of the more notable events of his public career.

At an advanced age, Ecgwyn resigned his episcopal duties, and lived in comparative retirement as head and first abbot of his monastery until his decease, which occurred about the year 718, the day being stated by his biographer as the 30th of December. His offices, according to the *Old English Calendar*, were, however, sustained upon the 11th of January. He was interred under the Church of the monastery. Saint Ecgwyn, according to his own account, was throughout life "a dreamer of dreams and a seer of visions," all of course having for their aim the furtherance of his sacerdotal aspirations; but for none of the numerous and striking episodes of his career does he more solemnly vouch and endorse the veracity of, than the truly marvellous story of the *ubiquitous fish*, the effigy of which appears with that of himself upon the remarkable signaculum before us.*

* Dr. Husenbeth kindly informs me that should he receive sufficient inducement to publish another edition of his *Emblems of Saints*, St. Ecgwyn will certainly find a place there, as, besides being accompanied by the *fish and key*, he is represented wearing his voluntarily imposed fetters, and causing a fountain spring up.

ON SOME ORIENTAL GEOGRAPHERS.

By F. Boyle, Esq., F.G.S.

Read 22nd April, 1869.

It is difficult for the ordinary traveller of our times, observing the sedentary habits, the listlessness, the fatalism of modern Orientals, to credit what activity of mind and body but a few centuries ago distinguished the Arab, the Persian, the Malay, and even the Chinese nations. The ardour of a new faith, the promptings of an ambition suddenly aroused, the very delight and wonder of their own success, then stirred the Musulmans of every clime to tempt dangers hitherto viewed with terror,—urged them to trust their own valour single-handed amongst heathen foes, or to defy the elements themselves. This fervid spirit, as we know, did not permanently endure. Five hundred years after the prophet's death it already was passing off, and although the great Malay conquerors of the fourteenth and fifteenth centuries had somewhat of the old fire in their souls, that extensive commerce of the Arabs and Persians, which it had been one among the greatest aims of their first rulers to encourage, was decaying rapidly. I purpose in this paper to say something of those early travellers whose stories have come down to our own times, and I would preface what I have to tell with a very short summary of the knowledge possessed by the ancient world upon this subject of oriental geography.

Herodotus, to whom one turns, of course, for information on such matters, has but little to tell us of the Eastern world, excepting of Persia and Media. The conquests of Alexander first gave to Europe a slight idea of the countries lying immediately on this side the Indus, and laid the foundation for that commerce which has since been carried on without

interruption. Major Rennell opines that the Ptolomies had a direct communication with all parts of India by sea, from their port of Berenice, but the gross products of that country were probably conveyed through Persia by land and water carriage. It was not, apparently, until A.D. 50 that even the action of the monsoons was practically understood. About that time a certain Hippalus, captain of a vessel in the Red Sea trade, stood out from the straits of Bab-el-Mandeb, and trusted himself to that wind, henceforth known throughout the ancient world by his name. The S.W. monsoon carried him to Musiris, on the coast of Malabar, and from that date the ocean traffic with India may be said to have commenced. A century afterwards, the author of *The Periplus of the Erythrean Sea* was able to correct the gross mistake of Ptolemy, who had described the coast line of Hindostan as running nearly east and west, with the delta of the Ganges somewhere in the latitude of Siam. Ptolemy, however, had extended the knowledge of his contemporaries as far east as the Malayan peninsula, and the western coast of Cochin China. With the fourth century this trade by the Red Sea began to suffer from the competition of Persia, and gradually dwindled away, under the later Emperors of the East, until the Arab conquest of Egypt. In the reign of Justinian we have evidence that the trade by sea still continued, in the travels of "Cosmas the Egyptian," who wrote an important work called *Typographia Christiana*. After the subjugation of Egypt and Persia by the Moslem, the entire Eastern trade fell into Arab hands, and for a time, as I have said, it was prosecuted with a vigour and intrepidity hitherto unknown. Expressly with a view to encourage this traffic, Khalif Omar founded the city of Busrah, between the Persian gulf and the point of junction of the two great rivers Tigris and Euphrates. From that date we have numerous accounts of merchants and travellers voyaging to and fro

over the Indian seas. Masudi, in his great work called the *Moroudj-al-dzeheb*, takes the first place among these geographers, but there were others much earlier in date. Some years since, M. Stanislas Julien published a translation of a Buddhist work, which recounts the wanderings of Hiouen-thsang, who set out in the year 629 A.D. to examine the condition of those disciples of his creed resident in India and the Eastern islands. For seventeen years he wandered up and down, on his pious pilgrimage. Starting from Liang-tcheou, in the north-west of China, this enthusiastic disciple of Buddha made his way overland to Peshawur, a journey which we are now just attempting to repeat; thence to Kashmere; thence, turning southward, to Benares; through north-east Bengal, to the delta of the Ganges; southward still, along the coast, to Madras. Then back, northwards and westerly, to Malwa, through Sindh, Moultan, and at length home. This voyage, which tells us somewhat of countries that no civilized man has since visited, is eminently Chinese in character: minute to a singular degree, and apparently precise. Mr. Fergusson, in his most valuable work upon *Tree and Serpent Worship*, has drawn very freely from this interesting diary.

Another voyage, as early in date as the beginning of the ninth century, is that of Soliman, which has been several times translated into French and English. M. Renaud's edition, published in 1845, consists of two parts, first, the writing of Soliman himself, and, second, the commentary upon it, almost contemporaneous, published by Abú Said Hassan. To these two authors we are indebted for a vast amount of information relating to the ancient divisions of India and the far East. Soliman set sail from the Persian gulf for Quilon, which he reached after one month's voyage. Thence he proceeded to the islands of Lendjebalous, which M. Alfred Maury concludes to be the Nicobar isles. Thence, touching at various places, he passed to Sumatra and Java,

and, proceeding further, reached (probably) Siam, and Cochin China;—throughout the record of his voyage we find evidence of a most extensive commerce between the Persian gulf and the remotest kingdoms of the East.

In the year 1324, Ibn Batuta, the most active and diligent of Arab or Moorish travellers, set out from Tangier, with a primary object of making his Haj, or pilgrimage, to Mecca, and a secondary desire to see the world. The book in which he has recorded his adventures, is full of interest, not altogether void of the droll extravagance of which I shall give some examples in speaking of Abd-er-Razzak, the Persian voyager, but very much more useful to later students than is that curious work. Wandering from Tangier to Egypt, from thence to Arabia, and onwards to Hindostan, Ibn Batuta at length found himself at Delhi, high in favour of the tyrant Sultan Mohammed, whose cruelty was destined to break up the monarchy bequeathed him by his father. From this position the traveller escaped by accepting a post of honour in an embassy despatched by the sultan to the emperor of China, whither he attempted to proceed by ship from Calicut, A.D. 1342. But before the coast was gained his party was attacked by rebels, every member of it slain except himself, and he compelled to return alone to the emperor. The second attempt had better success. After a long and interesting journey, well described, he reached Calicut, where the Chinese vessels were awaiting his arrival. But, while in course of embarking, a cyclone swept the harbour, and once more Ibn Batuta found himself bereft of his colleagues, who were drowned, his property, which was sunk, and all his wives, who were carried off to China, and there confiscated by the emperor's order. The Moorish traveller found himself once more in utter poverty, but resigned himself to fate. Not the least curious feature in the lives of these voyagers is their calmness under any sufferings that do not actually

cause bodily pain, and the apparent inconsistency of their conduct. One would have expected Ibn Batuta to return once more among his friends, and borrow or beg a fresh outfit. Not so does he act. Setting sail from Hanavar, he quietly resumes his vagrant life of former days, and, in process of time, turns up successively at the Maldive Islands, Ceylon, Java, Sumatra, and China, of all of which he treats in his book, whereof a translation was made by Professor Lee of Cambridge, for the Oriental Translation Committee, 1829.

Ebn Haukal is the most famous, perhaps, of Arab geographers, probably because he has given more trouble to the commentators than any other of them. But his *Itinerary*, called the Masalek Memalek, is very uninteresting. It lacks the life and spirit of these other countrymen of his. Amusing it cannot be called, except to that gifted mind which could discern entertainment in the pages of a railway guide; instructive in some degree it may have been to the author's contemporaries, who recognised the obsolete or distorted names which now drive geographers to despair. It gives, as a rule, neither winds nor tides, and never latitude or longitude. Its barren lists of distances are neither accurate in themselves, nor deducible to any uniform standard. Once in a while Ebn Haukal throws off some such hint of trade as "here they export slaves of white "complexion," or "here, (at Sirin,) they find a certain thing "called *mouhi*, resembling fine beaver, or raw silk; it rubs "itself against the stones on the sea shore, and its plumage "or down comes off, which the people gather and weave "into garments, which cost above a thousand *dinars*." Ebn Haukal was only acquainted with the coast towns of Hindostan, and his idea of the interior was of a desert, which the natives alone could enter, so full of danger was it. In this desert lay the city of Canooj, and past this stretched the Cheen Macheen, "beyond which no man passes."

As an example of the tone or manner of an Oriental traveller, I cannot find a more characteristic author than Abd-er-Razzak, the son of Ishak, a Persian-Arab of the fifteenth century. I will very briefly trace his route, and then comment upon his manner of viewing the events and wonders he beheld. Abd-er-Razzak, was born at Herat, in A.D. 1413, and at twenty-four years of age entered the service of Shah Rukh. Four years afterwards he was sent on an embassy to India, and of this voyage he has left a detailed account. After his return he was employed in various diplomatic services by the Shah and the Sultan Abu Said. He died at the age of sixty-nine, sheikh of the monastery of Mirza Shah Rukh, at Herat.

Abd-er-Razzak left his native town, January 13th, 1441, the first day of Ramazan, by the Kohistan route. Eighteen days after, he reached Kirman, where the devout Moslem paused for the feast. On the fifth day of Schewah, February 16th, he quitted Kirman, and, a fortnight afterwards, arrived at Ormuz, then a commercial centre of the greatest importance—"There," says the traveller, "merchants of seven "climates, Egypt, Syria, Roum, Azez-bijan, Irak-Arabi, "Irak-adjemi,—the provinces of Fars, Khorassan, Ma-wara- "Amahar, Turkistan, the kingdom of Kipchak in Tartary, "of the Kalmucks, of China and Cochin China, and the city "of Pekin, all make their way. They bring hither those "rare and precious articles which the sun, the moon, and the "rains have combined to bring to perfection, and which are "capable of being transported by sea. Travellers from all "quarters resort hither, and for all merchandise, except gold "and silver, a tenth of the value is paid by way of duty."

From Ormuz, which our traveller is never tired of praising, he set sail for India, but was compelled by stress of weather to put in at Muscat, where all the party lay several months in terrible anguish of mind and body. Here died the elder

brother of Abd-er-Razzak. At length, in May, 1442, he was carried aboard a vessel bound for Calicut, and, after a voyage of eighteen days, reached that city.

For some reason or other the ambassador does not appear to have been well received by the Sameri, or king of Calicut, although that monarch lay under great obligations to the Shah of Persia. But sovereign and people are spoken of with contempt by Abd-er-Razzak; the latter are more like devils than men, too dreadful to dream about, and the monarch is described as a worthy ruler of such black and naked fiends. He admits a few good qualities they possess, such as honesty and courage, but evidently dislikes the country. His position here was indeed embarrassing, slighted by the sovereign, and bitterly disliking every native of the country. After some weeks' discomfort, a message arrived from the King of Vijanagar* begging the Persian embassy to visit his court. With permission of the Sameri, Abd-er-Razzak accepted the invitation. Departing by sea from Calicut, he landed at the port of Mangalor, whence, after a stay of two or three days, he proceeded inland to the capital, remarking on the way two enormous temples, one of cast bronze, and the other built of some blue stone. Our traveller is excessively enthusiastic about the women of Belloor and Vijanagar. He compares them to several products of the earth and sky, roses, pomegranates, moons, and houris. This subject he again insists upon in describing the festival of Mahanadi, at which he was present in a place of honour. For Abd-er-Razzak fared better at the court of Vijanagar than at Calicut. The king gave him an audience, and proved most courteous, supplying him daily with rice, betel nut, gold, and camphor in abundance. But after some months the royal favour declined. Some merchants of Ormuz, actu-

* The name of this city constantly occurs in Arab writings on India. The ruinous evidences of its past glory still stand on the banks of the Turgabudra, opposite Anagundi.

ated apparently by fears for their trade interests, circulated a report that Abd-er-Razzak had no credentials from the Shah, nor was aught in fact except an adventurer. On this the king's tone changed, and the ambassador shortly afterwards quitted Vijanagar, with spirits much harassed by his successive misfortunes.

He set out on the return journey on 12th Kaban (Nov. 5), 1443, and on 8th Zu'lkadah (January 28th), 1444, sailed from Mangalore; after a terribly bad voyage reached Muscat in March, and, on a day very white in Abd-er-Razzak's calendar, landed again at Ormuz, April 22nd, 1444. According to the scheme proposed, I shall say a few words of the work in which this voyage is narrated.

The author commences with a short explanation of his hopes in publishing the book—viz., that learned men will ponder its information, and approve it. He then magniloquently refers to the evidences of a deity's existence in the order of the stars, the vastness of the ocean, and many other aspects of nature. After a while we come to the essential fragment of fact contained in this mountain of husk, namely, that he, Abd-er-Razzak, "in pursuance of the orders of Pro-"vidence, &c., &c.," was commanded by his Majesty to undertake a voyage to India. The passages that follow, telling of his journey to Ormuz, and the description of that wealthy port, are very interesting. But the sea again tempts our excitable traveller into rhapsodies terribly incoherent. "As "soon as I caught sight of the vessel," he says, "all the "terrors of the sea presented themselves before me. I fell "into so deep a swoon, that for three days respiration alone "indicated that life remained within me. When I came a "little to myself, the merchants, my intimate friends, cried "with one voice that the time for navigation was passed. * * "All with one accord, having sacrificed the sum which they "had paid for freight in the ships, abandoned their project,"

and precipitately leapt ashore at Muscat. At this moment, when his "heart was crushed like glass, and the mirror of his "understanding had become covered with rust, in consequence "of this hurricane of painful circumstances," our brave traveller heard by accident a merchant speak of Herat, at the mention of which august city he "went very nearly distracted." Hastily requesting the merchant to pause a moment, he plunged into poetry, and threw off the following verses :—

"When in the midst of strangers, at the hour of evening prayer,
"I sat me down to weep,
"I recall my adventures, the recital of which is accompanied by
"unusual sighs.
"At the remembrance of my mistress and my country, I weep so
"bitterly
"That I should deprive the whole world of the trade and habit of
"travelling.
"I am a native of the country of the Arabs, and not of a strange region."

Our voyager is excessively poetical. Every circumstance of his travels suggests a copy of verses. Speaking of the climate of Muscat he thus delivers himself:—

"Soon as the sun shone forth from the height of heaven,
"The heart of stone grew hot beneath its orb;
"The horizon was so much scorched up by its rays
"That the heart of stone became soft as wax—
"The bodies of the fishes at the bottom of the fish-ponds
"Burned like the silk which is exposed to the fire.
"Both the water and the air gave out so burning a heat,
"That the fish went away to seek refuge in the fire.
"In the plains the chase became a matter of perfect ease,
"For the desert was filled with wasted gazelles."

Then he falls ill, and the opportunity is not neglected—

"I am reduced to such a state of weakness, oh my friend! that the
"zephyr carries me each instant from one climate to another, like the
"swell of the wave.
"I continue no longer in my gay position, for the action of fate has
"made me rise and fall, like the cord of a hydraulic machine."

Exquisitely droll is the poor courtier's description of his maladies. He exhausts the wealth of Oriental metaphor to express his sufferings, and when this resource fails, continues his moaning in such verses as I have quoted. At length,

"regarding the past as having never occurred," he is carried by a "few strong men" on board a ship bound for Hindostan, and, without loss of time, turns the occasion to account, and indulges in a mountainous feast of quotation, hyperbole, and verse.

At first sight of the natives of Calicut, prose fails him again: he bursts into awful song. They are, he declares,

"Extraordinary beings, neither men nor devils;
"At sight of whom the mind takes alarm!
"If I were to see such in my dreams
"My heart would be in a tremble for many years!

"I have had love passages with a beauty whose face was like the "moon; but I could never fall in love with a negress."

The last strophe is not to be surpassed.

His description of Calicut and its people; of his voyage to Vijanagar; the temple at Mangalore, and other monuments existing in his day, are all exceedingly valuable. But his poetic vein is irrepressible. Telling us of the great temple at Beloor, he remarks that—

"Since its head shot up towards the skies, that vault, previously "without stones in it, now seems formed of them.

"Since that its stones have rubbed themselves against the sun, the "gold of that orb has taken a purer alloy."

Then we get to the regions of sober sense again on reaching Vidjanagar, where the traveller beheld certain feasts, and noted down some events, for which we are grateful to him. In fact he behaves like a sane though excitable person during his stay at Vidjanagar. But he recovers his wilder self on the return journey. The storm that overwhelms his vessel in the Persian gulf is described with droll vehemence, but even at its height our intrepid author does not neglect the muses. He tells us that "the planks of which the ship was composed, "and which by their conformation seemed to form a continu-"ous line, were on the point of becoming divided, like the "letters of the alphabet. The sailor who, with respect to his "swimming, might be compared to a fish, was anxious to

"throw himself into the water *like an anchor*. The captain, "though familiarised with the navigation of all the seas, shed "bitter tears, and had forgotten all his science. * * * For "myself, in this situation, with tears in my eyes I gave my- "self up for lost. Through the effect of the stupor, and of "the profound sadness to which I began a prey, I remained, "like the sea, with my lips dry and my eyes moist." Then he betakes himself to poetry—

"My mind, hitherto so strong, was like the ice that is suddenly ex- "posed to the heat of the mouth of Tamong; even now my heart is "troubled and agitated, as is the fish taken out of fresh water.

"May the torrent of destruction overturn the edifice of fate, which "thus brings in successive waves the waters of misfortune upon my "head."

And again, in prose not less impressive:—"The pure water "of my life was troubled by the agitation of the sea; and the "brilliant mirror of my ideas, *in consequence* of the damp- "ness of the water, and the putrefaction of the air, was "covered with rust. Each moment that the pupils of my "eyes contemplated that muddy water, it resembled, through "the effect of my extreme alarm, a flaming sword. At sight "of the agitated sea, overset by the tempestuous winds, I drew "from my breast an icy sigh; it was a sharp weapon, which "tore my very soul."

One cannot but rejoice that the traveller who has left such exquisite fooling, for the amusement of later generations, reached home in safety, and died in his bed at a ripe age. If any member of the Historic Society should wish to make closer acquaintance with this droll but interesting work, I should recommend him to procure Mr. R. H. Major's *India in the Fifteenth Century*, published for the Hakluyt Society, wherein will be found the very sympathetic and admirable translation of Abd-er-Razzak's itinerary which I have used for quotation, and much more information on the subject of Oriental voyages to India from which I have quoted.

It is singular that the Malay language and literature have

attracted so little attention from the zealous orientalists of our day. Sanscrit, Persian, Chinese, and Hindustani have their unfailing supply of enthusiastic students, but with the recent death of Mr. Crawford, the Malay has lost its sole champion of eminence. Yet is this a language vastly important. What is the Lingua Franca on the Mediterranean coasts, that is the Malay throughout the further East. It forms an universal medium for communications relating to seafaring matters. It is the natural speech of some millions of people, and the root-tongue to a countless population; and in islands or countries where the interior dialect has changed almost beyond recognition from the parent stock, it is still an intelligible language on the seaboard. If one take a map, and roughly estimate the area over which Malayan is the sole tongue,—pure Malayan that is,—one may indeed deny the importance of its study; but on extending our view over that larger space where, though not universal, it forms the *current* language, that into which the aboriginal tongue, or dialect, is naturally interpreted,—one cannot but feel surprise that more regard has not been paid to it. The first category is short enough—Malacca, Sumatra, and Celebes, are the only countries of size and importance of which it can be said that Malay is the sole language in use; and even this assertion must be received with a great deal of qualification. But in the second category must be reckoned the whole Indian Archipelago, from Achen Head to the Gulf of Carpentaria. Nor is this all. The philologist, examining the languages of the Philippines, of New Zealand, Australia, all the islands, I believe, between the Sandwich Isles and the Marquesas, will find that their root lies bedded in the Malay. The mere extent of land and water where their tongue still bears evidence to the energy and courage of these rovers, is probably little less than one-sixth of the world's area, though the population there dwelling is of course quite out of proportion

to the space it occupies. And we do not yet find any token of its dying out in favour of another speech. The Chinese are indeed pressing hard upon those less earnest races inhabiting the south-east of Asia; indeed one can already foresee a time when the Celestials will regain that importance throughout the Malayan countries, which, in their latest strongholds, they only lost a century ago. But this language does not seem to threaten the native tongue, nor, looking at its singular difficulties of grammar and pronunciation, can we believe it ever likely to supersede, in European favour, the simple and melodious Malay. We know that even to this day, there are villages about the foot of Kina Balu, in Borneo, where Chinese is commonly spoken side by side with the native dialect, but those who use the foreign speech are themselves descendants of the old Chinese settlers, driven out for the most part, or murdered, by the present sultan's grandfather. There is no evidence that the Chinese has anywhere triumphed over the Malay, or even the Javanese, but one day's stroll through Singapore or Pulo Penang, will shew the traveller what rapid strides the latter easy tongue is making even among foreign immigrants.

Unquestionably the Malay is a language most important, as the current medium along the seaboard from Aden to Japan; in which latter country, I believe, very many of its words have been naturalised; if indeed the Japanese is not, as some have fancied, to be reckoned among those countless tongues which spring from the Malayan stock. I once escaped from a disagreeable position at Kandy, by addressing a few words of Malay to the hostile mob, and I have heard a negro at Panama interlarding Malay words in his discourse—apparently with the understanding of his hearers.

But the number of persons who have made a real study of this spreading tongue is very few. I never heard of any scholar in this generation, except the late Mr. Crawford, who

could write or even read it with fluency. Sir James Brooke, the most perfect master of its elegant inflections, equally with its most pedantic complications, could not; or else he did not care to take the trouble even in very simple communications. He always had his letters read to him by a native secretary. But the explanation offered sounds reasonable enough. "Why undertake a most laborious study which can "never be turned to profit?" people say. "Why learn to "read a language which has no literature?" This reproach is constantly cast at the Malay, and it is not to be denied that a certain degree of truth almost justifies it. Undoubtedly, if all known manuscripts in this language were brought together, and the little pile compared with such a mountain of parchment as Arab, Hindu, Persian, or Chinese could easily erect, our Malay library would appear very small in quantity, and rather uncouth in style or character. This is not a literary people. Its signs of writing are all borrowed; its very words, expressive of abstract ideas, are for the most part stolen, from Arabic, Persian, or Hindu. English, in later years, has contributed several expressions to the Malay vocabulary. But there are important works in this language, though few in number, and almost exclusively confined to one subject—sea travel. This is highly characteristic of the race. The *Annals*, some stories from the *Arabian Nights*, some heroic poems, a very few treatises upon minor points of religion, and certain works containing laws of the various kingdoms, are the sole exceptions that I know of. I am speaking of pure Malay; in the Javanese dialect there is, I believe, a considerable number of original works, and the same may be perhaps the case in some other countries.

But the genius of the race, well shown in the title or name they arrogate,—"orang laüt," men of the sea,*—is essentially

* This expression was once applied almost exclusively to the piratical peoples. Of later years, all Malays have laid claim to it.

maritime and adventurous. Hence the commonest works that have been written in their language,—or, at least, that have survived the great confusion which for the last two hundred years has involved this people in its various seats,—treat of voyages and of wonders beyond sea, of currents and miracles, of products and saints, of trade and supernatural marvels. There is not less of the latter element here than in the Arabic and Persian geographies, but on the other hand, there is more of the information useful to practical men. The Malay is unmistakeably a sailor, and, when the fortune of his race was at its apogee, when the thirteen kingdoms flourished in a certain barbarous order and civilisation, he was unmistakeably a great merchant. These facts are constantly impressed upon one in hearing the story of this "Nicodah" or that, preserved to our day. When one takes up a *Mesalek Memalek*, or the periplus of some renowned Arab or Persian, Ebn Haukal, Edrisi, or Moustouffi, one is frequently puzzled to understand in what capacity the geographer made his travels, but there is not such probability of error as regards the very few Malay travellers whose works have come down to us. The former class consisted of persons, very enthusiastic no doubt, and excessively hard-working, but essentially philosophic,—to that degree that a fact is of the same value to them whether useful or not;—the other, of sharp, business-like men, credulous as children,—much more so than the others,—about matters outside their own line, such as the doings of Solomon in bygone days, and the habits of supernatural beings at the present time, but full of practical wisdom as to the things of every-day life. There is in them also a vein of humour, or what I cannot but fancy to have been meant as such, wholly absent from their more pretentious models. Ebn Haukal had heard of the Romans, and perhaps, though his orthodoxy would not allow him to confess the truth, knew a good deal about them,

and about the Greeks also; Nicodah Mummin was profoundly ignorant of these matters, but, *en revanche*, he was infinitely better "up" in the doings of jins and sorcerers. Ebn Haukal cared nothing about winds and currents, apparently conceiving that only two seas existed on the earth's surface, the Mediterranean and the Persian, whilst Soliman enumerates seven between the mouth of the Tigris and China; Nicodah Mummin apparently considered that his main duty lay in setting down rules for sailing in given waters, rules for trading in given localities, and general hints about things useful to be known by the sailor and the merchant.

The misfortune is that these MSS. are so very few, and so ill written. The Malays never had a national alphabet, and, these many centuries past, they have been corrupting their spoken language, taking words from every nation with which they have come in contact. The *lontars* of the several states, codes of law and custom, which have great authority in many parts;—the celebrated "Malay Annals," translated by Dr. Leyden;—and various editions of the voyages of Sawira Gading, the heaven-descended hero of this nation—are almost all the works of any antiquity which have been made known to Europe. Many more exist, of which the names will be found in Dr. Leyden's list, Marsden's, and other Malay scholars', but few of them have been translated. Indeed, if one credit the opinion of the late Rajah Brooke, than whom no better authority could possibly be found, there are more *titles* current and accepted than there are written works, but I myself have seen manuscripts in Malay hands, and have heard passages from them read for the amusement and instruction of my crew, which, I feel quite sure, would be found of vast interest and importance to English geographers. One in especial I recollect, which treated, either as a main subject or episodically, of the invasion of Java by Malays, A.D. 1400, and the destruction of the great city Mudjophite—if I rightly

remember the name. But, as has been said, there are too few persons interested in the Malay language or literature, and a pressing danger exists that we may lose some or all of these curious records.

And this consideration brings me to the last point on which I would touch. Of all towns of the world Liverpool has the most widely extended commerce. Your ships sail to every quarter, bearing in many cases citizens of intelligence resident among you, who go out on their own business, not pressed for time, nor too much engaged with the details of that transaction which has necessitated their presence. Such gentlemen I have met, pleasantly wandering up and down the Eastern countries, surveying their natural objects of interest, and observing with no unintelligent eye the various records of antiquity which from time to time they encounter. Unfortunately these gentlemen, though amply endowed with means to further geographical or historical research, do not generally possess much knowledge of the special objects in demand by our learned societies, more particularly in regard to geographical matters. If a manuscript be offered them for sale, as frequently happens, they look rather at its quality as a work of art than at the particular interest or value of its contents; for they have no means of distinguishing between a copy of some well-known and well-edited manuscript and some inestimable treasure that has not hitherto been brought before the eyes of our *savans*. Resident in Liverpool, they have not the opportunity to keep themselves acquainted with the progress of geographical research, and doubtless let slip many chances of furthering that science from mere ignorance that their evidence would be of value in regard to this or the other point. But why should not Liverpool have its own Geographical Society? If we quit the special ground which I have been treading to-night, there will be seen yet stronger proof that such a society is particularly needed in your town, and would

probably be of very singular service to the general cause. You have among you retired seamen, merchants, and others, whose wanderings in the pursuit of their business must have made them acquainted with most valuable facts in geography and ethnology. Give these gentlemen the opportunity of meeting together, of discovering gradually, by conversation and debate among themselves, by hearing the crude opinions of other people, by reading the discussions of our London society, what it is that our learned men know, what they seek to discover, and where they hold mistaken views—I have no doubt that within a short time the Geographical Society of Liverpool would take very high ground indeed, especially for the practical nature of its discussions. The parent body in London, headed by our venerable President, would greet with most cordial welcome its young sister. In Liverpool, with a few of your leading merchants on the list of members, geographical science would make rapid strides. What country in the world is unvisited by their ships? If the captains, clerks, doctors, supercargoes, and other officers of intelligence, had orders to gather information, from all sources open to them, on the phenomena of nature, the characteristics of the land, the peculiarities of the race, in every clime to which they travelled, we might with reason expect the most valuable result from their enquiries. At present such men are like children wandering in a realm that teems with precious stones. They know not what to search for; they toss aside some gem of priceless merit to secure a tawdry pebble, or preserve pebble and gem alike with equal care, knowing neither the value of the one nor the worthlessness of the other. I feel confident that the suggestion only was needed to induce the formation of such a society, which would bring not only increased honour to your town, but besides, a lasting benefit to the cause of science.

ARCHÆOLOGY IN THE MERSEY DISTRICT, 1868.

By Henry Ecroyd Smith.

(Read 16th April, 1869.)

No general remarks are requisite in relation to our limited archæological doings during the past twelvemonth, which will speak for themselves.

Roman Coin at Parkgate.

A labouring man recently turned out of the soil, in an arable field in the vicinity of Parkgate, a second-brass coin of *Claudius Cæsar*, reverse LIBERTAS, AVG; in the field a figure of Liberty standing.

The occurrence of even an odd coin of Roman fabrication is noteworthy in these sceptical days, when even Roman knowledge as well as utilization of our shores is denied by some local writers. The above incident adds a small but useful link to the growing chain of evidence utterly condemnatory of such a groundless theory.

Excavations at Wilderspool, near Warrington, 1868.

Dr. Kendrick, of Warrington, has kindly furnished the following account:—"The excavations at Wilderspool, near "Warrington, have been carried on extensively during the "year 1868, and the increasing quantity of Roman remains

"found there during this period furnishes undoubted confir-
"mation of Dr. Robson's idea, that this is really the site
"of the 'Condate' of the 2nd and 10th Itinera of Antonine,
"which here crossed at right angles. A map of the dis-
"trict has become necessary to any particular description of
"the excavations at Wilderspool, and before the commence-
"ment of the next session of the Historic Society it is my
"intention to have one made upon a sufficiently large scale
"for present and future reference. On this occasion I shall
"restrict my remarks to an enumeration of the Roman
"remains which have been found here during the year 1868.

"Fragments of Roman pottery have been exhumed in large
"quantities, but the only entire specimen is a small hand-
"lamp, bearing on its base the letters 'F.FOCA.' The chief of
"these fragments are of the ordinary coarse structure and
"material, but there are also specimens of the blackened or
"Upchurch ware, and of the finer sort, known as Samian.
"Of these last the chief ornamentation consists of hunting
"scenes and floral devices, representations of the human
"figure being rare. In every other respect the specimens
"resemble the ordinary relics of Samian ware.

"At an interval of a few months the base and capital of a
"large stone pillar were exhumed, which may have formed
"part of an outer portico or door-way. Although the design
"is massive and bold, the execution is rude, marks of the
"pick-axe being visible on the surface, which is thus appa-
"rently left unfinished.

"The small hand-lamp, alluded to above, is the only entire
"specimen; it still retains the stains occasioned by the over-
"flow of the oil with which it was formerly filled.

"There is a great demand for the sand of the locality for
"building purposes, affording every prospect of these interest-
"ing excavations being carried on vigorously in future, to the
"great satisfaction of our local archæologists."

UNPUBLISHED SEAL

OF THE CONSISTORY COURT OF ST. ASAPH,

1571,

In the possession of W. WYNNE FFOULKES, ESQ., *Chester.*

Occurrence of a Mediæval Seal.

The descendant of an ancient but decayed Welsh family, for some time resident in Liverpool, being in very straitened circumstances, lately disposed of to Mr. J. Harris Gibson, a brass seal, which this gentleman has kindly brought under my notice for publication, as there can be little doubt of its preservation as an heir loom in a private family for a lengthened period. In common with the eccentric Mr. Micawber, antiquaries are always looking "for something to turn up," and this object thus rescued from oblivion, or the not improbable crucible, is as virtually unearthed as if dug from under a dozen feet of soil. The seal is in excellent preservation, produces a good impression, and measures, as represented, 2¾ inches in length by nearly 2 inches in breadth. The inscription round the rim runs—

✠ SIGILLVM CVRIE CONS DIOCESIS ASSAPHEN,

(*the seal of the Consistory Court of St. Asaph*), the interstices between the words being occupied by trefoils. The field comprises three compartments: in the centre the Judge sits under a canopy, robed, his left hand resting upon a clasped volume, roses and trefoils here occupying the interstices. Above is a little scroll ornament, and below appears the coat of arms of this official, charged with a *chevron* between three stags' heads *affrontées*, with the date of 1571 on top, much like the dates of Elizabeth's coins; but in this instance the arms divide the figures, two appearing to the left and the others to the right of the upper part of the coat, which Mr. Ffoulkes informs me is that of a descendant of Jarddur, Lord of Lleehwydwcha.

British seals are rarely found dated anteriorly to the seventeenth century, and enquiries upon the subject in the useful pages of *Notes and Queries*, vol. xii, third series, 1867, have only educed mention of two personal ones or

authentics, viz., one of Thomas de Beauchamp, 1344, and one of *gilded steel*, with folding handle, and manufactured for a member of the Stur family. Even of ecclesiastical dated seals but few specimens are known, the chief of these appertaining respectively to St. Augustine's Abbey, at Canterbury (the first year of Richard, King of England), 1189; Norwich, 1258; Winchester Cathedral, 1294; Cottingham Abbey, Yorkshire, 1322; Romney, 1358 (appearing as 1538, but the middle figures are believed to have been by some accident transposed); Aberdeen, double seal, 1430; Dean and Chapter of Canterbury, counter seal, 1540; Presbytery of Linlithgow, 1583. Upon the earliest of these examples the date appears in words; in the succeeding ones, letters are employed; and in the later, figures.

In the national *coinage*, dates first appear on the mintage of Edward the Sixth (1547—1553), the first known with a date being a testoon bearing, in letters, 1549. Numbers do not seem to have been introduced before the time of Philip and Mary, a sixpence of theirs being thus dated in 1554.

Taking all circumstances into account, the tardiness of our ancestors in adopting the French custom of recording the year of manufacture on coins and seals is remarkable and apparently unaccountable.

The head of the Consistory Court of St. Asaph, at the period in question, would doubtlessly be Thos. Davies, D.D., the Diocesan, who held the see 1562—1573, and was born at Llanbedr-y-Cennen, near Conway. It is very satisfactory to know that this interesting Welsh seal is now in possession of W. Wynne Ffoulkes, Esq., of Chester, an ardent collector of all remains illustrative of the history of the Principality.

Miscellaneous Objects.

Mr. H. G. Boorn Thompson exhibited at one of our November meetings the remains of a curious instrument in

hard stone, lately found by himself in a deep drainage-cutting, from twelve to fourteen feet below the level of *Chat Moss*, and at a considerable distance from any trace of cultivation. The article is about one inch thick, and six inches long, narrow at one extremity but gradually broadening out to the other, but at this end is much fractured; if edged here it has no doubt been a primitive *adze* or *hatchet*.

The same gentleman showed a *Half-Shilling* of Queen Elizabeth, dated 1580, a year in which, according to Mr. Hawkins's synoptical table of the reign, the only pieces issued from the mint were half-shillings and quarter-shillings, since better known as sixpences and three-penny pieces. The first coinage of Elizabeth contained no half shillings, but commencing with 1561 the denomination was so regularly issued that Mr. Hawkins makes it the standard of his synopsis of this long reign. The mint-mark in this example is a plain cross, a device used from 1577 to 1581. The coin was met with at Hurst Hall, ten miles north-westward of Manchester, a Tudor mansion now converted into a farm-house, but occupied by successive members of one family for the last century and a half. The portion of the park grounds where it was unearthed (8 inches deep), had not previously been ploughed within memory of the residents.

The writer, whilst bathing last August, picked from the beach opposite North Egremont a well formed *arrow-point* in bluish flint, one and a half inches long and of oval shape. Though evidently much abraded through long exposure to tidal action among the pebbles, it still exhibits the remains of a barb on either side. This object has no doubt been washed from the *debris* of the adjacent clay bank now protected by the river wall.

PRODUCE OF THE SEA-BEACH OF CHESHIRE.

The absence of propitious winds in connection with mode-

rately high tides during the past year has resulted in a very meagre show of relics, the larger portion of which have been added to the collection of Mr. Charles Potter.

The waste of the sand-brows between the house of Mr. Shaw at Great Meols and the Leasowe embankment continues as yet unabated, but at the former or westward point it is very probable that the steady extension of the Hoyle bank, now stealing opposite so as to be fast replacing the old "Dove" or "Drinkwater" spit of half a century ago, will effect ere long a sensibly protective influence. In this case a great diminution of the mediæval objects must be looked for, whilst the interesting and valuable Saxon ones may never more occur through tidal exposure, and only be met with as the result of incidental delving.

Before proceeding with the report, notice should be taken, in the interests of truth, of a most mendacious little publication purporting to be a "Guide to Hoylake, the Hoylake Railway and neighbourhood, by Braithwaite Poole," issued in this town within the last two years. Soon after appearance the author received a well-merited castigation at the hands of a contributor to a local and critical journal, but the writer of the article not being scientific has left unnoticed many capital points, which will be touched upon in their order. Instead of proving a *Guide*, the work

"Leads to bewilder and dazzles to blind,"

and, possessing far more false statements than pages, is aptly defined in that severest of critiques, "All that is new is not "true, and what is true is not new." In short, its publication is a discredit alike to the so-called *clever* author, the poor little bantling-line it tries to bring into notice, and the great town which has given it birth.

In the first paragraph, the distance from Woodside Ferry to the nearest terminus—for, like Mr. Bright's celebrated Skye

terrier, this railway has no distinguishable head or tail—is incorrectly given by this little railway manager. The same page acquaints us that the "noble river" Mersey was thus designated after "Belasamain, Queen of Heaven," copied no doubt from the excellent introduction to "*Mawdsley's Directory for Wirral* (1861)," but this unfounded assumption of Whittaker, handed down by others, has been satisfactorily controverted by Mr. T. T. Wilkinson and other recent authors, and is thoroughly exploded. *Mersey* was originally *mere-sea*, and named from the salt marshes of which it was composed before the waters of the Irwell forsook their old channel down the Broxbourne valley towards Dee. *Now* Mersey is a fine estuary of the sea, ever increasing in volume and straightening in its main channel, and though still familiarly spoken of as "the river" opposite Liverpool, yet the term is wholly incorrect in a descriptive "Guide" for strangers.

In the next paragraph Wallasey is called a "fishing village," and the water tower of the whole district is made to belong to it, neither assertion being founded on fact. Passing the outrageous description of "countless numbers of steamers, "*blockade runners*, and other large ships and *frigates*," as seen from the docks station, the reader is transported on the wings of the author's imagination to Bidston church, which is said to be "nestled among *lofty trees*," which Nature cannot for the life of her raise in this exposed marine locality; whilst the building itself, the tower of which fortunately retains some ivy on its western front, is said to be "nearly covered" by this picturesque climber.

Further on, Mr. Poole gravely informs us that the hill above is "formed of *boulder-stone*," a piece of startling news for Mr. G. H. Morton, who will be constrained humbly to revise his "Geology" of the district at the feet of this new Professor. As for accuracy, we might with equal reason be told that Bidston hill consists of *Welsh slate* or *granite*;

nay it would only have been in keeping with the unbounded impudence of these pages, had their concoctor endeavoured to tempt travellers to "the line" by the declaration of *auriferous quartz!*

Under the heading of MEOLS, this name is erroneously said to be pronounced *Meltz*, a misconception of *Melse*, which, by the by, never meant "pasturage," neither did it originate with the Meoles (not *Meolses'*) family, for both are derived from the adjacent sandhills!

Mr. Poole continues, "here we find a large pond, belonging to the Railway Company, *made for the accommodation of passengers, to fish in, and skate upon;* another pond, of still larger dimensions, is likewise available at Hoylake." The best comment on this are the facts of the Meols pit having been dug to supply material for the adjacent roadway over the line, whilst the shallow pool at the Hoylake terminus was formed in consequence of other ballasting requisites. The latter was *dried up* last summer, and thus the *kind providence* of the directors was neutralised. A more flagitious attempt upon the gullibility of the public, than the statement just quoted, can hardly be imagined; had this scientific and literary *brochure* been issued early on some first of April morning, it might have passed as a poor attempt at humour, but the seriousness of the writer is unquestioned.

HOYLAKE, though the most modern name in the whole district, we are now told "may be said to *embrace* the townships of Little Meols, *Hoose*, and Great Meols; but as well might Seacombe or Bebington be called Birkenhead. Its name is most absurdly said to be derived from small craft called "hoys," instead of the *Eye* or island now called Hilbre, (a few centuries back the three islets formed but one,) *Eye-lake* becoming corrupted into Hoylake.* The soil is incor-

* See *Transactions*, New Series, Vol. VIII, p. 101.

rectly said to be "*on gravel and sand,*" whereas in the village the only soil, if such it can be termed, *is* sand alone, whilst the sod of the neighbouring fields landward covers a turfy bed.

No further proof of the incompetency and ignorant conceit of this writer is needed than his penultimate paragraph supplies. "*Much has been said and written to prove that "Hoylake rests on the top of a submarine forest, and that "it has been a Roman station.*" No writer has ever made such statements, but Mr. Poole may rest assured that neither he nor any one else can disprove the existence, between Great Meols and Leasowe, of subterraneous remains of two early and long extinct wood-growths, above which primeval, Romano-British, and mediæval objects have been found, incontestibly proving a series of successive occupations, extending through all periods of this country's history. Many other instances of gross misstatement might be pointed out, but those produced suffice to exemplify the utter untrustworthiness of this local "*Guide.*"

Primeval.

1 Piece of *slaty limestone* cut into a rhomboidal shape, such as occurs in tumuli of early character, though it is but recently these objects have attracted the notice of antiquaries, who incline to the opinion that they were used for *polishing* purposes. This example was found by the writer on the side of *Thurstanston Hill,* on the highest point of which he picked up some years ago a *flint chisel,* or rather the *finely ground and bevelled* extremity of one, a beautiful example of uncivilised manipulation.

1 *Limestone.* A rudely fashioned arrow point.

19 Objects of flint or silicious limestone, *pointed, hooked,* or in other ways *edged,* including a few of the so-called "Scrapers," supposed to have been chiefly used by our primitive ancestors for cleaning skins.

Romano-British.

1 ***Billon or Base Silver Denarius*** of Marcus C. Latienus, POSTUMUS, Usurper in Gaul, A.D. 260 to 267. The reverse has been so badly struck, or possibly injured in *recoining*, as to render its inscription around a standing male figure quite illegible.

1 ***Third Brass*** apparently of the *Tetrici*, the obverse bearing a bust of the father and the reverse that of his son; neither of the inscriptions are legible.

2 ***Bronze Studs***, of small size, probably from a strap.

3 ***Dress Pins***, fragmentary, plain.

1 ***Buckle***, with central transverse bar for *acus*.

3 ***Bow Fibulæ***; one, a plain but substantial brooch, nearly 2in. long, found by the writer upon a short range of the shore where *Saxon* objects have almost exclusively occurred, and lying considerably to westward of the Roman area. It is an additional instance to the numerous ones furnished by the exploration of the Rev. Bryan Faussett a century ago, of Roman-British objects, continuing in use to some extent far into the era of Pagan Saxondom. The prevailing notion that immediately upon the retirement of the Roman mercenaries from this country in the fifth century, its whole civilization collapsed, is simply an absurd popular error, based, like most of its class, upon mere assumption. This civilization, exercised for three centuries, could not possibly have pervaded the highest class merely, but favourably modified more or less every rank of life in this fine province. It is a poor compliment to pay the prosperous and intelligent population of this period, to assent to its sudden relapse into the semi-barbarism of the Gaul or Britain of Cæsar's day.

1 *Fibula* of the same shape, but more slightly formed; of later date, and probably made in the transition period just mentioned.

2 TERRA-COTTA. Fragments of "Samian Ware," washed out of the blue clay and left by the tide upon the surface of the upper forest-bed.

1 GLASS.—*Pin-head* of transparent emerald green.

By far the most valuable discovery of the year is that of *human cremated remains* of this period, characterised by peculiar if not extraordinarily exceptional circumstances. The writer has repeatedly noticed portions of burnt bones embedded in the upper blue clay mentioned, but these had never been identified as human, although strongly suspected to be such. The various skeletons which at times have occurred on this shore, as the notorious one at Leasowe in 1864, and a still more recent example in the brow near the "Redstones," are, without exception, of recent origin; in short, no human remains of a really early date had been recognised.

The writer, accompanied by a young friend, was lingering in the gathering shades of an August evening near the old forest stumps, hoping ere departure to find some relic of this period, when a circular patch of black matter on the blue clay attracted his attention. Though already ravaged by the tide, it nevertheless retained what proved to be portions of the cremated head of a child, of from 8 to 10 years of age, including fragments of the crown and back of the skull and a couple of incisors. The blackened brain and charcoal confined nearly to the capacity of the skull, had naturally given the idea of an interment in a round hole or possibly an urn, though no signs of such a receptacle remained. The absence of fragments of

other and larger bones, however, excited suspicion as to the correctness of this view, and led to a further search, resulting in the discovery of portions of the leg bones extended at length; but these had been subjected to so much superincumbent pressure as to be flattened together, and what with this fracture and their humid condition it was with the greatest difficulty a few pieces from one to two inches long could be cleaned from the unctuous soil for examination.

Evidence was secured that, for the purpose of this very unusual inhumation, the blue silt—probably forming at the time the surface-stratum—had been removed to the extent of about 4 feet by 1, in which the *partially cremated remains of a child were deposited at length, with the head to the west*, in a bed of sand, as a much dryer material than the silt. Although the grave had been dug in the closest proximity to the upper surface of the higher forest bed, they had not come into actual contact, and the fact suggests the query—was the latter known to the inhabitants of the district at this period? It is possible that the encroaching sea had not yet attacked it, but even were this the case at the distance of a mile or more seaward, the presence here of such a bed may not even have been suspected.

Instances of *cremated* human remains being interred at length, have been so rare, that it will probably prove a very difficult task to find a parallel case. Although the general use of the *rogus* or funereal pile of the Romans was discontinued by them some time anterior to the withdrawal of their troops from Britain, yet isolated cases recur up to a late date, and, more puzzling still, tumuli of the *Anglo-Saxon* period in Derbyshire and elsewhere have produced cinerary urns

unquestionably the manufacture of this Scandinavian race, though probably of earlier date than the introduction of Christianity, or at least its diffusion throughout the heptarchal kingdom.

Whatever opinion we may entertain on this point, it seems clear that the present case of deposition has been effected during a *transition-period*, whether it be termed late Roman or early Saxon, and this point conceded, a remarkable confirmation is supplied to the writer's arguments in previous annual notices, in favour of this identical blue silt being a product or formation of at least a portion of the Roman-British era, the objects then lost sinking through water, as around the *crannoges*, and becoming enveloped in the constantly accreting residuum below. Upon the drainage or evaporization of the mere, this bed would soon be covered, as we find it by drift sand during westerly gales, some of which has apparently been utilized to pad the otherwise damp receptacle for the dead.

Saxon.

1 Bronze.—*Pin-Brooch*, with cruciform ornaments.
1 Ear-ring.
1 Glass.—*Head of a Pin*, of a dull green colour and opaque.

Mediæval.

3 Silver.—*Pennies** of Henry II, 1 minted at London, 2 uncertain.
6 *Ditto* of Henry III, viz., 2 London, 1 Bristol, 1 Gloucester, and 2 uncertain.
2 *Ditto* of Edward I or II, 1 London, 1 Lincoln.

* A few odd halved pieces are included in this designation. As yet no two halves found on this shore have been identified as originally one.

2 *Halfpennies*, Edw. II, of the London mint. One of these is one division of a quartered piece, thus constituting a *mite* in value.

1 *Farthing*, Edward II, London.

1 *Brooch* of quatrefoil form, with fleur-de-lys in the angles; centre a round cusp, with chequered base, which was probably filled with coloured pastes.

2 *Fermails*, plain.

3 LATTEN.—*Brooches*, various, imperfect.

2 *Fermails*, respectively $\frac{3}{4}$ in. and $\frac{1}{2}$ in. diameter, perfect.

6 *Dress-pins*, including several ornamented *heads*.

2 *Needles*, $2\frac{1}{2}$ in. and $1\frac{1}{2}$ in. long.

1 *Key*, formed as usual from a piece of sheathing.

2 *Rings* of uncertain date.

2 *Ear-rings*.

2 *Finger-rings*.

3 *Rings*, plain, of various thickness and uses.

91 *Attachments of Straps or Girdles*, viz., 28 *Buckles*, (including fragments, but of different examples); 13 *Hasps*, 4 *Keepers*, 9 *Tags*, 19 *Bosses* and *Studs*, and 18 other small ornaments.

1 Handle of cofferet, or drawer of a small box.

1 Loop, possibly from the frame of a gypciere or purse.

1 Portion of *Ornament*, elaborately executed.

1 Fishhook, 2 in. long.

3 PEWTER OR LEAD.—*Brooches*. One rectangular; another bearing rim of roses, alternating with ornamental cusps in high relief, which have lost their coloured settings; the third has been inscribed, but is only a fragment.

1 *Chape of Dagger-sheath*, with pierced ornament, $1\frac{1}{2}$ in. long.

1 *Spatula*, well tempered, and probably used in pharmacy.

1 *Pendant of a Girdle*, inscribed I.H.S.

19 *Attachments to Straps*, viz., 2 *Buckles*, 1 *Hasp*, 1 *Tag*, and 15 *Studs*.

4 *Rings*, plain and ornamented.

6 *Links*, of small size, from a chain; a perfect one has an acorn-shaped termination.

5 *Fragments* from the *mountings* of wooden cofferets.

1 *Head* of a large dress or hair *pin*, which possesses a lateral orifice communicating with the central perforation.

1 *Net-sinker*, rectangular, with numerous partial perforations, only one being completed. Found upon the New Brighton shore.

1 *Spindle-whorl*.

4 IRON.—*Clench-bolts* from old boats.

1 *Knife*, with carved bone handle, 16th century.

3 *Hooks*, various.

1 IVORY OR BONE.—*Handle* of knife just mentioned, carved in striated and herring-bone patterns.

1 *Handle* of a smaller knife, with carved ornament, 2½ in.

1 LEATHER.—*Boy's Boot*, 9 in. long,—cut from *one* piece of tanned leather, and the inner side from the heel severed diagonally in a chevroned or vandyked manner. It was tightened at the ankle by an incision from the top, laced by a leathern thong. Date 15th or 16th century.

26 TERRA COTTA.—*Fragments of Household Crocks*, of 12th to 17th century, many unglazed, others partially so. A few are ornamented with rudely incised patterns, and others blackened through use (or abuse,) on the fire; two have apparently been broken into a square form, probably for draughts or other game. Several of the above were found on Hilbre.

3 GLASS.—*Beads*, including both the globular and annular shape, straw-coloured.

1 *Head of a Pin*, straw-coloured.

1 STONE.—*Spindle-whorl*, 2 in. diameter.

Later English.

This may be the best place for recording the discovery upon Hilbre by Mr. Hughes, of the foundation of a *circular building, excavated in the solid rock* close to the present verge of the western cliff, and about 100 yards N.W. of the telegraph station. That it has been formed for no common purpose, the semi-circular hollow, evidently for the revolution of a wheel several feet in diameter, and the irregular horizontal compartments filling up the ground floor, incontestably prove. Before investigation it was assumed to be the remains of the mediæval lighthouse here sustained—though how long history sayeth not—but the probability is strongly in favour of its proving the basework of machinery for raising the sea water in connection with the adjacent *salt works* mentioned in the writer's last report, several walls of which yet remain like the sandstone rock foundations, but little beneath the sod. This appropriation is confirmed by the existence of a channel one foot wide also cut in the rock, and continued to the cliff's edge, down which the waste water could pass off. Mr. Charles Hardwick, who visited Hilbre soon after the discovery, has kindly promised a plan of the excavated rock from a sketch and admeasurements taken on the spot. In addition, one section of the superior arch of masonry completing the circular stone enclosure for the wheel, was dug up close by.

1 COPPER *Halfpenny* of Charles II, "*Carolus a Carolo.*"

3 BRASS *Knee Buckles*, 3½, 2½, and 2 inches long respectively.

1 *Brooch* in form of a flower, surrounded by 6 smaller ones affixed to a disc, *temp. Queen Anne.*

2 PEWTER Knee Buckles, one 3¼ by 2 inches.

1 Portion of a Mould.

3 TERRA COTTA *Heads of Clay Tobacco Pipes* of 16th century, devoid of potters' marks.

8 Ditto of 17th century; marks, "THOMAS NEYS" on the rest, and "H. P." in a radiated semicircle or horse-shoe ornament.

3 Ditto of 18th century, without marks.

1 Mould in pipe-clay for rifle bullets, exteriorly heptagonal.

Animal remains from the various littoral strata have occurred less numerously than usual, though they include bones or teeth of deer, horses, oxen, swine, sheep, and dogs. No fine antlers have recently occurred, and the few small horns of the *Bos Longifrons* belonged to immature individuals. The skull of a small species of whale, found to eastward of the Leasowe embankment, proves the sixth cetacean relic recorded on this shore in a fossil state. Its measurements are—length 10½ inches, breadth 9 inches, spinal orifice 1⅝ by 1¾ inches.

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282 Total number of objects of archæological interest found in or near the sea-beach of Cheshire, irrespective of human and animal remains.

SYNOPSIS.

1. DATE.

Primeval	22
Romano-British	15
Anglo-Saxon	3
Mediæval	219
Late English	23
	282

2. MATERIAL.

Silver	17
Bronze and Latten	137
Pewter and Lead	46
Iron	8
Terra-cotta and Glass	48
Stone	23
Ivory or Bone	2
Leather	1
	282

ON THE GAINS AND LOSSES IN HISTORIC PROGRESS.

By David Buxton, F.R.S.L., Hon. Sec.

(Read 14th January, 1869.)

In the recent festive season, which, besides its sacred associations, has been so indissolubly linked with our literature, in the works of Sir Walter Scott, Washington Irving, Charles Dickens, and others, I had the opportunity of hearing, in a distant part of the country, a Lecture on Christmas Carols, which was accompanied by many interesting poetical and musical illustrations. Some of the older carols quoted were characteristic and quaint: some of the later ones were genial and appropriate; but, between these, there came some, which truly to describe is to say that they were of the vilest character of badness. The "sense" was nonsense; the measure was doggerel; the tunes (I cannot say, the music) were the veriest sing-song. These were the carols of the last century. There was no good carol-singing then. There were no good carols to sing. Now this, which appears to be *two* facts, is only *one*. And if we look at it, closely and carefully, we shall find that it very noticeably exemplifies a principle which further enquiry will shew us to be of very wide and general application. It is this:—

When a thing is neglected, the power of appreciation dies out: and the neglect of one age entails a positive loss upon succeeding generations. The age which cared nothing for Christmas carols, left the following age no Christmas carols worth caring for. One age stands still, and the next retrogrades.

I think the principle here indicated is of very extensive application; that it illustrates and accounts for many incidents and apparent anomalies in that erratic thing called Human Progress; and that its manifestations are consistent and uniform, though its operations are in fields utterly remote and diverse.

Look, for instance, into our own immediate subject of Archæology. Is there not, in every volume it unrolls, a story told, of attainments made and then surrendered; of successive arts arrived at and then lost; of craft, and cunning, and skill, in design and workmanship, which we admire and wonder at, but which we cannot emulate or imitate;—which have died, either with the hand that wrought them, or with the generation in which they flourished? When "there arose up a new king "over Egypt, which knew not Joseph," (Exodus i, 8,) then all the blessings which had been showered on Egypt through the incoming of the Hebrew immigrants were forgotten; and the race which one grateful Pharaoh had delighted to honour became the object of oppression and cruelty to his degraded successor.

All History tells the same story.* So also does Art. The massy construction of the Pyramids was effected by mechanism of which succeeding ages were as ignorant as the savage of

* The generation which denounced mince pies, and suppressed the Christmas festival, by Act of Parliament, did not stop there. They deprived their children not only of Plum Pudding, but of King, and Church, and Archbishop, and House of Lords: and the profanation and destruction which an American Bishop has so glowingly described in the verses given below,+ have been followed by this result—that from that day until our own, during a period of not less than two centuries—there never was built a single church in this country which any man of taste and knowledge is not ashamed of. I say this, remembering all the while the great merits of the works of Wren. But though St. Paul's is a magnificent building, it is not a Church.

+"And a lawless soldier tramples
Where the holy loved to kneel,
And he spurns a Bishop's ashes
With his ruffian hoof of steel!
Ay, horses have they stabled
Where the blessed martyrs knelt,
That neigh where rose the Anthem,
And the Psalm that made us melt.

There once a glorious window
Shed down a flood of rays—
With rainbow hues and holy,
And colours all ablaze!
Its pictured panes are broken,
Our fathers' tombs profaned,
And the font where we were christened
With the blood of brothers stained."

Christian Ballads.—By Bishop Coxe, of Western New York.

the wilderness. The sculpture and the architecture of ancient Greece stand at a point which leaves all after generations far behind. We cannot paint like Raphael, or Titian, or Rubens. We cannot fabricate the light and graceful work of such artificers in iron as Quentin Matsys. We are only just groping and finding our way back to something like, yet far inferior to, the work which the unknown architects of our abbeys and cathedrals wrought in the middle ages, poising the "high-"embowed roof," in an airy lightness which seems too fragile to endure, yet which stands to-day as firmly as it did five centuries ago. We admire, but we despair of imitating, the exquisite work in silver of Benvenuto Cellini. The art by which our fathers stained the glass which let in the "dim "religious light" on Milton's yet undimmed vision, is lost to their descendants: and the mysterious combination of materials by which the potters of days long past produced their matchless ware, leaves their products matchless, for we know not how they made them. Majolica, Chelsea, and other rare examples of earthenware are not only rare, but becoming rarer; for as the specimens perish, they cannot be replaced.

If this were the fitting time and place, and I the proper person to draw attention to it, I suppose the most direct and telling evidence in illustration of this subject could be drawn from the History of Religion in this country. I can only treat the matter historically, not polemically,—in the spirit of the critic, not in that of a partisan;—and in this way I call your attention to the fact, that what in one place is called "Church "Restoration," and in another "Religious Revival,"—while it is styled "Development" by one school, and stigmatized as "Innovation" by another, is, after all, marked by one character, and is referable to one cause, namely, the desire to reach a point which has once been attained, and then lost;—the burning longing to vitalize forms which have become dead; to revive doctrines which have lost their hold; to renew what

has become obsolete; and to make the men of this generation answer to appeals which thrilled to the very core, in days gone by, brave men and strong,

> "Whose bones are dust,
> Whose swords are rust,
> Whose souls are with the saints we trust.

Thus, whether the watchword and the striving of the zealous be for "Primitive Christianity," "the Catholic Faith," or "Evangelical Religion;" the motive and the purpose are the same, in each case. Martin Luther and George Fox; John Wesley and Edward Irving; not to speak of our own times, and quote the names of living men—all owned the power of this spell; all acted under this impulse; all strove, in their manner, and after their light and power, to awaken men's souls, as St. Paul had done, and to make it visible before the world, that "GOD had not left Himself without a witness" in the dreariest and most degenerate times; but that CHRIST was verily, as He had promised to be, with His own people, always, "even to the end of the world."

But perhaps this is to regard the subject in an aspect too serious for the occasion. And, to come down to lower themes, is it not true that if you neglect any faculty of the body, or attribute of the mind, its strength fails, its purpose is imperfectly fulfilled, it dies away for want of exercise? Neglect a child, and it will die. Neglect a plant, and it will perish. Cease to care properly for anything, and you will soon have nothing to care for.

So in like manner, in the life of the body politic. If you have gained a footing in advance, you must maintain it. We are laboriously and painfully toiling up hill in all the victories we achieve over matter and the powers of resistance—physical and moral. We are urging on before us a spherical body, which, if it is not pushed onwards, will roll backwards. It can only be moved onwards and upwards by our unflagging,

energetic efforts: it will not stand still, even, unless we hold it there; and if we leave it to itself, the advantages so hardly gained are speedily lost again. I think I have heard it stated that in some departments of medical science the ancient sages unlocked mysteries, and found secrets revealed to them, which have ever since been closed against their successors. The Ancient Masters in painting are at once the admiration and the *despair* of their posterity. The art of teaching the deaf and dumb was discovered and actually applied by a Spanish monk (Pedro Ponce de Leon) in the thirteenth century: but it was not until the middle of the eighteenth that the steps were taken which have led to the establishment of schools for their instruction—nearly all within the last fifty years—in almost every country in Europe, and the principal States in America.

So in our Literary history. After the age of Elizabeth had been dazzled with the splendour of Shakspeare, Spenser, and other great men of those days, the reign of James had nothing to amuse itself withal but the antics of the pigmies. After Milton and Dryden, and the great names of the Restoration period, had departed; and Addison, Swift, and Pope, had given their lustre to the reign of Queen Anne, we drop down upon the dreary *regime* of the Georges: and though Johnson and Goldsmith are to be mentioned with honour, we cannot forget that even Johnson himself, in those degenerate days, could condescend to notice, and to commend, the rubbish of the so-called "English Poets," whose natural dead weight would have sunk them into oblivion, if their critic—Johnson himself—had not by his notices of their eventless lives and dreary works, floated them into familiar knowledge, though not to fame. Indeed I know scarcely any more humiliating period in our history than that which Thackeray has included in the term of the "Four Georges." In morals and religion, in public spirit and political sagacity, in art and science, in

all, or *nearly all*, that makes a people great, and a nation prosperous, this country was in a position which one cannot but regard with shame. I have purposely said in "nearly all" respects, for I must, from the sweeping denunciations of these various particulars, except *one*. It is this. The country which, whatever its other short-comings and offences, could annex India to the British dominion, actually by the courage of a mere handful of men fighting against millions; which could afford to lose America and be none the weaker; and to battle with and crush Napoleon and his power, and be none the poorer for it; which sent forth the fleets of Nelson, the armies of Wellington, and the expeditions of Cook, had power and life within it which have now, thank GOD, borne worthier fruits in other fields. May they be perpetual!

Every privilege gained, every right conferred, every difficulty overcome, every advance achieved, must be *held good*. *Quod tuum, tene*, was the motto of one of the most illustrious of Lancashire worthies (Sir Humphrey Chetham). In its best sense, it should be ours. The attainments, the victories, the gains of every generation, are the patrimony and heritage of their posterity. The voices of all the ages past, the claims of contemporary interests, and the rightful expectations and demands of the ages to come, all express themselves in the charge of the aged apostle to his disciple Timothy—"Keep "that, which I have committed unto thee."

THE SO-CALLED "PETRIFIED HUMAN EYES," FROM THE GRAVES OF THE ANCIENT INDIANS, ARICA, PERU.

By the Rev. A. Hume, D.C.L., F.S.A., &c., Vice-President.

(Read 14th January, 1869.)

A very large portion of the Republic of Peru, especially that which is near the Pacific coast, forms part of an extensive district in which rain is unknown; and in several important respects,—especially in the periodical overflow of many of its rivers,—it bears a marked resemblance to Egypt. This state of things is partly an effect of the improvidence of the ancient Spaniards. They cut down forest trees wherever they could find them, for the purpose of smelting the minerals in the neighbourhood; and hence, rain, which had been small in quantity, disappeared entirely; vegetation ceased except along the banks of rivers; and the sands of the desert buried hundreds of square miles, previously fertile.

Stretching from Arica on the coast, in Lat. 18° 27′ S., the railroad passes over thirty-nine miles to the town of Tacna, which is on the high road to the Cordilleras, and to Bolivia. This is now a treeless waste of sand, which sparkles with myriads of hexagonal crystals of salt; indeed scarcely a shrub or blade of grass is to be seen. Yet it was formerly known as "the *Forest* of San Juan de Dios;" and no doubt trees were abundant, as in many other places of the same

kind, where now the railway traveller may see the *mirage*, perhaps every day of the year.

At Arica, and in the immediate neighbourhood, animal matter does not decay as elsewhere; it simply becomes desiccated. Hence, the bodies of Indians who were interred perhaps centuries before the arrival of the Spaniards, are turned up to-day as natural mummies; and specimens of them may be seen in most of the public museums of Europe and America. The Arica of the present time is only a seaport village; as the pretty little town was destroyed in the earthquake of 13th August, 1868. But even this town was modern; and it is believed that a great city, the inhabitants of which were largely engaged in fishing, occupied the same spot. Certain it is, that a large mound just outside of the town, consists in a great degree of human flesh covered with sand; and as the Peruvian government have forbidden all interference with these remains, the mound is not likely to diminish as it has done. It is recorded that the earthquake of last year separated a portion of the adjoining hill or "Morro," near a place known as "the Incas' cave;" and that a row of corpses was visible for weeks, each in a sitting posture as usual, and some with the former implements of their daily toil beside them.

At various times, there have been found, near these bodies, small hemispherical objects of amber-looking matter; and occasionally they have been found in the eye-holes of the skulls. These objects have naturally been supposed to be human eyes; but as they have become completely solidified or hardened, they have been called incorrectly (even on that theory,) "*petrified* human eyes."

I saw two of them at Iquique in the South of Peru, and heard a great deal about them all along the coast. On my return, in July 1867, I found that they were still occasionally picked up, by the workmen who were engaged in preparing

sites for the cannon to defend the port; and as they did not come under the head of corpses, and could be readily secreted in the pocket, they were carried away and sold. When the interior hemisphere of the object is started out of its corresponding socket, it appears like a split pea of solid gold; and the young men of Arica and Tacna frequently get them mounted, to serve as shirt studs. An English woman who had a small shop, collected in barter numerous antiquities and curiosities from the workmen, without any distinct idea of what to do with them; and from her I procured several objects of great interest. Among these was her stock of "eyes," the current retail price of which was half a dollar, or about 1s. 6½d. each.

Such being the simple facts of the case, I proceed to give the only theories which are known on the subject; in the hope of eliciting some final decision, on the best evidence, as to what the objects really are. I may add that the subject is one which has greatly interested gentlemen of the medical profession, both in the United States and in England; and that the newspaper known as the *Panama Star and Herald*, which has a large circulation on the west coast, preserves and diffuses carefully, all the information obtainable on the subject.

I. *First Theory*; that they are bonâ fide *Human* Eyes.

Testimony of the late W. Billinghurst, Esq., Acting V. C. at Iquique.

"On my part, I have to state that when I resided in "Arica, I was a daily visitor to the scene of the excava- "tions in the Indian burying-ground, at the foot of the "Morro: and witnessed the exhumation of the bodies,— "many of which were in a perfect state as mummies. "The eyes were generally found in the vicinity of them, "and in some instances *were attached to the sockets*,

"which I think is strong evidence to confirm the belief "that they are human."

Report of Henry W. A. Coleman, Esq., M.D., Iquique.

"They are human eyes, in a state of petrifaction. The "external tunics have become decomposed, and obliter- "ated by time, leaving only the vitreous humour with its "*membrana hyoloidea*; and having the crystalline lens "imbedded in its cup-like excavation, or *fossa hyoloidea*. "By continuous boiling with water, this lens becomes "separated; and its compact membrane or capsule can "be distinctly seen. The *nucleus* of the lens is easily "distinguished, also the subdivisions of its surface, "showing its three layers concentrically arranged like "those of an onion, which by a minute examination can "be seen to be closely aggregated fibres."

II. *Second Theory*; that they are the Eyes of *Fishes*.

From Dr. MacDowell of Taboga Island. *Panama Star and Herald*, January 21st, 1865.

"The Indians were cunning workers in gold and "precious stones, and in elegant textures of cloth. The "Indian also took to the grave with him, his most valu- "able things;—*chicha* and favourite provisions, jugs "and water coolers. The so-called 'eyes' are greatly "sought after. They are brownish in colour, and with "pearl-like reflections; formed of concentric cup-like "laminæ, peeling off like the coats of an onion, on the "convex side. Viewed in front, these laminæ form con- "centric circles, diminishing to a round minute ball in "the centre; while numerous fine lines run like radii "from the centre to the circumference. The form is "that of a plano-convex lens, with a diameter of ½ of "an inch, and a vertical axis of ½. The substance is "evidently organic, but in no other way has it any affinity "with the human eye. With the difference that the stri- "ated lines run transverse instead of radial, it exactly "resembles the eye of a shark. I lately made a dissec- "tion of one of these eyes, and hardened the lens in "acetic acid; and it assumed almost the exact appear- "ance. I feel that they are the eyes of some similar

"animal;—but it is a question for the microscope and "for comparative anatomy."

III. *Third Theory;* that they are the *lenses of the eyes of a Cephalopod.*

A Paper was read at the Ethnological Society of London, 10th January, 1865, by Sir Woodbine Parish; of which the following account is given in the *Athenæum* of January 21st:—

"Associated with the interments of the ancient Peru- "vians, there have long since been found certain "hemispherical amber-coloured objects, which the late "Mr. Clifts of the College of Surgeons, determined, "from some specimens shewn to him by Dr. Wollaston, "to be the desiccated eyes of the cuttle-fish,—an opinion "now confirmed by Professor Owen and Mr. Bowman. "Lieut. Rising, R.N., who forwarded the present speci- "mens to the author of this paper, found them in the "sockets of the eyes of some Peruvian mummies at Arica. "The purpose to which they were applied is thus defi- "nitely settled."

To this last fact, the late Mr. Billinghurst adds,—

"They are found often in the sockets, with a black "matter adhering, like coagulated glue."

This was supposed by some, to be one of the coats of the eye dried up; and by others to be an artificial substance, for the purpose of making these foreign bodies retain their new places.

IV. *Fourth Theory;* that they are *vegetable* matter, not *animal.*

Extract of a letter from Dr. C. M. Tidy, of Cambridge Heath, Hackney, London.

"When I received the eye, I showed it to my colleague "Dr. Letheby, as well as the Professor of Comparative "Anatomy at our Hospital. We were all agreed in this, "that it was not a human eye, nor was it the eye of an

"animal at all. Dr. Letheby's impression at once was, "and I perfectly agree with him, that it is a resinoid "exudation from some tree; and this I proved further "by analysis. The *form* is at once explained by this; "the concentric laminæ also;—and the various colours "that are apparent may be explained by the length of "time that elapsed between the exudation of one lamina "and another, and the amount of oxidation it would "undergo. I have myself no hesitation in stating that "it is a ***vegetable*** and not an ***animal*** product."

With such a wide difference of opinion among those who should be the best qualified to judge, a non-medical writer should be cautious in the expression of an opinion. Yet there are two considerations, apart from the examination of these objects themselves, that are entitled to some weight.

(i) The first is, that the idea of Immortality entertained by the heathen of all countries, including the Indian of South America, is merely that of human life re-produced, with some trifling alterations. Hence, one sees a logical reason why certain necessaries and comforts of human life, as well as the implements of war, the chase, or domestic industry, should be clustered round the bodies of the dead. It is supposed that all these things will be subservient to important uses, in the passage through the next world. But the very same principle in the Indian mind, appears repugnant to the idea of repairing the human frame with foreign materials. Why should the ancient inhabitants of Arica insert eyes,—either of animal or vegetable matter,—in the heads of their friends, any more than they would patch up a maimed person, with the leg of a mule or the teeth of a goat? They expected the man to re-appear as he had disappeared;—at all events in a condition no less perfect than that which he occupied in human life. It is just possible that the rude fishermen supposed their departed brother would pass to the world of

spirits *through the water;* in which case, one would see a reason, in their minds, for his being supplied with the eyes of a cuttle-fish, or of some other inhabitant of the water, of recognised powers of vision.

(ii) The second consideration is, that if these objects be formed by numerous coats of vegetable gum, dropped and laminated round a common centre, at considerable intervals, then something of a similar kind should be found still, in the same locality, or in neighbouring places under the same conditions. Although the forest of San Juan de Dios has disappeared, the flora of South-western Peru are well known; and there could be no difficulty in ascertaining, whether there be at the present time, exudations of the form and colour of those which we have been examining. Even if this were ascertained, two questions would still remain; viz. (1) are they produced by hundreds, so as to supply, if necessary, the requirements of a whole city of the dead? And (2) how does it happen that they are almost invariably of the same size,—viz. that of a boy's large marble, wanting a segment nearly equivalent to a hemisphere?

A very remarkable fact is, that each of the various theories is enunciated with a degree of confidence that seems to exclude even a hypothesis of a contrary kind; and yet each is encumbered with difficulties of a moral or physical kind, which, for the present at least, appear to render its reception impossible.

POSTSCRIPT.

In the interval which has elapsed between the reading of the foregoing paper, and its being formally printed off,—further information on the subject has been procured.

I. One of the eyes was exhibited at the Meeting of the British Association at Exeter, and the various theories were

stated. The almost unanimous opinion was that the eyes had originally belonged to creatures of the cuttle-fish tribe.

II. Within the maws of albatrosses, presented to the Liverpool Town Museum by Captain Cawne Warren, were found the beaks of "squids" or cuttle-fishes, and these hemispherical objects, (evidently the eyes,) identical in form with those found in the mummies, but neither so hard nor so yellow. Mr. T. J. Moore, the Curator, by whom they were exhibited, showed also several specimens in spirit, of squids taken off the British coast, in the centre of the eyes of which, amber-like objects were shown, very closely resembling the eyes from Arica.

This seems to settle, beyond a doubt, the actual character of the objects.

THE LATE MR. ELMES AND ST. GEORGE'S HALL.

By J. T. Kilpin, Esq.

(READ 19TH NOVEMBER, 1868.)

THE name of Harvey Lonsdale Elmes, connected as it is with a building which is the principal architectural glory of Liverpool, and one of the greatest triumphs of art in modern times, must always be regarded with a lively interest by the inhabitants of Liverpool, and merits that a fuller, juster, and far more eloquent record than I am able to give of his career, talents, and character, should be preserved in the archives of the Historic Society. But having complied with a request made at a recent meeting of the Society, that I should read a paper on the subject, I shall this evening endeavour to fulfil the promise.

Dr. Johnson's definition of genius, that it means great general powers accidentally directed to the sedulous cultivation of any pursuit whatever, scarcely applies to the case of Elmes. No lucky incident, similar to that which occurred in the instance of Benjamin West, the painter—who being set, when a boy of nine years of age, to watch his infant sister in the cradle, on seeing it smile in its sleep was impelled by an irresistible impulse to try and sketch its features, and so began that career which brought him from the back settlements of America, and placed him in the presidential chair, as the successor of Sir Joshua Reynolds, of the Royal Academy—awakened the architectural taste and genius of Elmes, and

impelled him, in the face of adverse circumstances and innumerable difficulties, to the study and practice of architecture. He was trained and directed in the way he should go; his path was easy and his road was straight. He studied his profession in the office of his father, an architect and author, whose "Dictionary of the Fine Arts," published more than forty years since, though in some measure superseded by later publications, is still often referred to, and whose life of the architectural patriarch, Sir C. Wren, will always be read with interest, pleasure, and instruction. He survived his son for many years, and passed a considerable period of the latter part of his life in comparative affluence, and in the enjoyment of a widely extended professional reputation as surveyor to the port of London. Though the bias of young Elmes' taste and the bent of his mind was decidedly towards the classic and Italian styles of architecture, he had not, I believe, enjoyed the pleasure and advantage of visiting either Rome or Greece; and it is remarkable that Sir Christopher Wren, though his dome of St. Paul's far excels in beauty the domes of either the Pantheon or St. Peter's, had no opportunity, by personal inspection, of studying the beauties or avoiding the defects of either, and Elmes, though he designed a building exceeding in magnitude and rivalling in classical beauty the temple of Minerva, never ascended the Acropolis at Athens, or contemplated the splendour of the Roman Coliseum. But, great as are the advantages of foreign travel, yet so numerous are the publications, so accurate the measurement, so full and correct the delineations both of the general proportions and the minutest details of all the celebrated buildings of antiquity, that *fac similes* of most of them might be executed by any architect without stirring from the country of his birth, or even the town in which he was born. The actual effect of these buildings, as they exist and have their being, and how far their beauties are augmented by an advantageous or

diminished by an unfavourable site and position, personal examination and inspection alone can show; and it is possible, if these two eminent artists had travelled abroad, their works, great as they are, would have attained still nearer to the standard of perfection.

About the year 1836, it was determined to erect, by public subscription, a large hall for the performances of sacred music, which had formerly taken place at St. Peter's Church, at the triennial musical festivals. Plans were advertised for, and after a severe competition the prize was awarded to Mr. Harvey Lonsdale Elmes, who had just entered upon his profession in London. In 1838 the first stone was laid, on the Queen's coronation day, by the mayor, Wm. Rathbone, Esq., attended by the Corporation. The assizes for the southern division of the county having been transferred to Liverpool, it was determined by the Council to erect suitable assize courts for the purpose, and a competition of architects for the plans took place, and Mr. Elmes was again successful.

Difficulties having subsequently arisen in carrying out the scheme for the Musical Hall, the whole arrangements devolved on the Corporation, who employed Mr. Elmes to prepare designs embodying the objects of both plans. The result was the design for the present building, which, however, sustained considerable modifications in the course of its erection.

Of his own views and wishes, with respect to the carrying out of the building, and the difficulties and opposition he had to encounter and surmount, some extracts of his correspondence with Mr. Rawlinson give a lively picture. Mr. Rawlinson was intimately and most confidentially connected with him; his assistance did much to promote and enhance the success of Mr. Elmes, and his sympathy to alleviate the cares and anxieties caused by his failing health. He acted as his executor, and proved himself to be a constant, anxious, and efficient friend to his widow and orphan.

Mr. Rawlinson says of him:—

"Mr. Elmes was not great by accident; he studied unceasingly and "earnestly. The compasses he chiefly used were his eyes, and every "line was considered with reference to adjoining lines, and to the whole. "His mouldings are Greek in character, but they are essentially his "own nevertheless. In appearance Mr. Elmes was gentlemanly and "refined: as a jockey would say, 'showed breeding.' He was of middle "stature, light complexion, fair hair, and bluish-grey eyes. In mixed "company and before strangers he was silent, quiet, and observing, "but with those he loved or respected he was cheerful, talkative, and "pleasant. Enthusiastically fond of good music, Mozart, Beethoven, "and Mendelssohn were his great favourites, and he could not bear "that one note should be misplaced. Architecture and music he loved "most; painting and sculpture came in for a secondary share of notice.

"Although Mr. Elmes was retiring, he was neither shy nor diffident. "He could speak, and to the point, either to individuals or to com- "mittees, and was ever ready and prompt with the requisite information "or explanation. He could also defend or advocate with clearness, "force, and ability. All good men loved him, and with bad men he had "as little as possible to do. If his character could be known, as his "great work can be seen, it would be more admired by all those capable "of appreciating true greatness.

"R. R."

We preface our selection with a letter addressed to Mr. Elmes by Mr. Rawlinson, as reference is made to it in that which follows:—

"April 2nd, 1844.

"Being in Liverpool more or less every week, you are frequently in "my thoughts, as I see your genius at work raising that temple-like "structure to pleasure the 'merchant princes;' whilst you, Aladdin-like, "are afar off, rubbing the magic lamp. How truly do the powers of "the mind equal, nay, even surpass the most sublime fictions of Eastern "story. The fervid thoughts of the poet's fancy, once penned, never "die; the magic touch of the painter's brush is immortal; the melody "of the musician is eternal; and the creations of the architect stand "fast for the admiration of millions yet unborn. For man to accomplish "never-dying works is worth the enduring all the disappointments and

"envy and sorrow he is heir to; working in season and out of season, "to accomplish with diligence the great end of existence; bearing in "mind how short his time; living in love and charity with all man- "kind; striving after perfection as the only means to satisfy his "immortal spirit. Man,—the little, the great, the divine!—how "poor, yet how rich! how weak, yet how strong! A sudden blast "of the elements destroys him, but the creations of his intellect set "them at defiance; his material form vanishes from the earth, but the "eternal mind, God-like, with firmness grapples time. Who does not "recognize the great soul of Handel in his heart-thrilling choruses, new "'for ever and ever?' or the mighty spirit of Sebastian Bach, in his "temple-shaking fugues? or the comprehensive mind of Wren, in the "massive grandeur of St. Paul's? All men cannot attain to this high "distinction in the eyes of their fellow-mortals, but all will be awarded "according to the use or abuse of the talents entrusted to them.

"The train of thought has been brought to my mind by contemplat- "ing the completion of your majestic building, destined to arrest the "admiring gaze of countless thousands. In this respect architects have "the advantage over professors of every other art or science; and this "the ancients knew and studied, hence the majestic, awe-inspiring ruins "of the faded empires, Egypt, Greece, and Rome—the learned, the "refined, the mighty! Oblivion shadows their once teeming myriads, "the magician priesthood, the cunning schoolmen, the imperial "conquerors. From our visible senses all have passed; but the ruins "of their architecture are enduring amidst surrounding desolation, "standing like huge skeletons, creating wonder through all time, "attracting the aspiring student from every civilized part of the globe, "and becoming an eternal alphabet to every modern nation. Such is "the exalted power of architecture!

"R. R."

Elmes to Rawlinson.

"London, April 30th, 1844.

"My time, as you may suppose, while at Liverpool, is completely "occupied; and, as I am still without any competent assistant in my "office, my duties are more arduous and mechanical than is either "pleasant or desirable. The strain of poetical feeling in which you "have clothed your complimentary allusion to the great work I have "the happiness to superintend at Liverpool, has tended for a while to

" sharpen the edge of my enthusiasm for our art, which was already " beginning to grow dull, with endeavours to cut through the grovelling, " money-making, selfish ideas of nine-tenths of the community—and I " was beginning to believe that the regions of poetry and imagination, " although they may be regions of bliss, yet they were by no means " dwelling-places for those who have their daily bread to seek. Yet I " should be ungrateful were I to forget that an occasional visit into " those realms constitutes the greatest gratification of my life. It has " not unfrequently occurred to me, that I should like to know with what " feelings those who are unaccustomed to the technicalities of the pro- " fession observe the progress of a large building. I fear in too many " instances it is merely looked upon as a pile of stones, in its most " mechanical sense, and there are few who, like yourself, can perceive " the operation of a directing mind, and yet there are few who are " insensible to beauty or deformity; and, as you observe, architecture is " peculiar in being exposed to public gaze so much more than any other " art or science, it is surprising that so little attention is paid to it, and " so little value attached to the labours of those who study so important " an art. When, however, the public become better informed upon the " leading principles of the art, we may hope for better things.

" How frequently do I observe the great and true end and aim of art " entirely lost sight of, in the discussion of some insignificant detail or " quaint antiquarianism. Bold and original conceptions never can find " favour while so much stress is laid upon precedent. I say, let archi- " tects study Nature, but let no man expect to form a new style or " school—that must be the work of successive generations; but let each " add his mite towards it, and this country may yet rival her continental " neighbours in producing original and beautiful works, equally adapted " to climate, materials, and habits of the people. Yet, strictly speaking, " architecture is not an imitative art, and has no type in nature; and, " therefore, it may be urged, why study nature? I know your opinions " upon this too well to occupy your time with an answer. As you are " frequently in Liverpool, I can tell you no news concerning that place. " You will doubtless have heard that the committee have determined to " introduce polished Aberdeen granite for the interior columns support- " ing the great vault, upon which, by the by, I shall be very happy to " hear from you, relative to your thoughts thereon, which you men- " tioned to me when I saw you. You may imagine that scarcely a day " passes without my thoughts being fixed in that direction, and, as yet, " I have no fear of ultimately accomplishing it. I am having some

"diagrams prepared, which show the relative proportions of the arch "and its abutments, which I should like you to see.

"H. L. ELMES."

ELMES TO RAWLINSON.

"11, GORDON STREET, Dec. 11th, 1844.

"My friend, Mr. Cockerell, is about commencing a new bank in "Manchester, a branch bank of the Bank of England; and I have "been endeavouring to persuade him to use our stone from Darly Dale. "I hear from Heathcote that he can lay it down in Manchester at "1s. 7d. per foot, if you should require any of it. I am very desirous "of knowing more of Manchester, and I hope during the next summer "that I shall be able to spend a few days with you there.

"With respect to your observations on the Exhibition, I wish you "would try your hand at architecture, and stir up a little spark of "feeling for it; although in a domestic sense it must yield the palm to "painting, at least where carried beyond mere utility, yet the pleasurable "sensations, indescribable almost, produced by a well-proportioned and "symmetrically-arranged room, to go no further, are worthy of appre- "ciation. Architecture as a noble science and beautiful art, in the "highest sense of those terms, at present exists unfortunately only in "ruins, or in history, or imagination; but utility, and utility alone, "will ever save it from utter oblivion, and in all ages it must be "acknowledged as indispensable to human existence. These observa- "tions cannot apply to paintings, or to sculpture, not that I would part "with our handmaidens, but only claim an equal rank and equal "consideration. Consider, too, the effect produced by painting and "sculpture as auxiliaries to architecture; the first by rendering the "massive wall rich with varied colours, and indicating space beyond, "so delightful to anticipate; thus charming the eye, while the noble "subject may interest and instruct the mind. The latter, devoid of "colour, yet pre-eminent in form, the material harmonizing with the "architecture in massive durability; while the gracefully flowing "drapery, the marked expressive countenance, and the apparent "capability of motion, all contrast with the greater severity of the "architectural framework. Were this feeling general, alas for gilt "frames, and watch-boxes for statues.

"The predicted fall of my vaulted ceiling, made by the 'great

"authority' in Liverpool, I find has not been confined to that town; "it has been reported in London to have been abandoned.

"Notwithstanding these idle reports, I am proceeding steadily in my "purpose, and, with due care and attention, I entertain very little doubt "of ultimate success. I shall, however, like to have a little talk with "you upon it when we meet.

"H. L. E."

Elmes to Rawlinson.

"London, Dec. 25th, 1845.

"Your last eloquent and imaginative letter was really startling, and "quite aroused me from the dry, dull, every-day way of thinking, that "common-place but bread-and-butter-getting business is driving me to.

"My capitals for the columns inside must be bronze; the cove "being of granite prevents the introduction of marble. They will "require plenty of brass, and so shall I when I ask for the money for "them, I think. I am happy to say that I entertain no doubt but that "the pediment will be adorned with one of the richest compositions in "sculpture ever executed in this country.

"I am not afraid of a single brick in thickness at the crown of my "great arch; but I am very anxious, if I can, to introduce hollow "tile-work, although, if I understand you correctly, not exactly what "you mean. As the work proceeds, I am obliged to take up each part "separately; and that will shortly have its turn, when I should like to "have a little talk with you about it, and must manage to come over to "Manchester to see you. I hope you were pleased with the effect of "the granite columns.

"H. L. E."

The following letter is particularly interesting, as conveying Mr. Elmes's own idea as to the internal arrangement when finished. It has not been followed out:—

"London, Nov. 30th, 1846.

"Procrastination, they say, is the thief of time. That it is the thief "of men's good intentions I verily believe, for it has robbed me of three "or four really good ones every day since the 3rd instant, the date, I "am ashamed to say, of your last letter. I am glad you seem to like "my granite shafts. I would rather have them in their present integrity

"and honesty, capless though they be, than the most gorgeous scag-
"liola with real cement capitals that were ever designed. I hope
"when you 'contemplated the finished structure' that there was no
"organ at the end, but that you stood on the judges' platform in one
"court, your eye glancing along the ranges of ruddy columns on either
"side, in all richness and strong colour of a foreground; then reposing
"for an instant on the lofty arched opening communicating with the
"hall,—whose broad and richly coffered soffite throws a shadow upon the
"grey columns beneath, and forms the middle distance,—it pierces the
"atmosphere of the great hall, passes the corresponding opening into
"the other court, without distinguishing a particle of detail from the
"great distance, and finally rests upon the judges' throne in the other
"court. Such, my dear friend, is a faint expression of what I hope and
"trust some day we may see together. I have no doubt it is altogether
"below the standard which your imagination has led you to expect;
"but, believe me, no thought nor labour on my part shall be spared to
"make it worthy the admiration of all good men. To please all would
"be out of the question. I am in great doubt as to the material for my
"capitals; statuary would be a ruinous cost! What think you of iron?
"and if so, what process will preserve it from decomposition, without
"paint or periodical applications of that kind?

"I am much obliged for your sketches of hollow tiles; they would
"be admirable, and delight Dr. Reid beyond measure, as nearly the
"whole of the ceiling might be porous. But what can I do with such
"a contractor for brickwork as I have to do with, who puts every
"difficulty that ingenuity can devise in my way, instead of assisting to
"carry out the work properly?

"H. L. E."

Elmes to Rawlinson.

"Ventnor, Isle of Wight,
"June 24th, 1847.

"Anxiety and over exertion have at last made such an inroad upon
"my constitution, that about a month since I was obliged to leave
"London at a few days' notice, for the purpose of obtaining a little
"repose for the present; and I believe I shall be compelled to winter
"abroad. The difficulty of arranging matters, so that business shall
"not stand still during a seven or eight months' absence, you may
"easily imagine; and I assure you it contributes in no small degree to

"increase my anxiety. I am happy to say, however, that I have met "with the kindest sympathy from all my employers at Liverpool, who "all urge upon me the necessity of following the advice I have received, "and making health a primary consideration. It is possible I may go "to the Island of Madeira, or to Jamaica, I am not sure which. I "originally proposed visiting Italy, but I have been advised against it, "as my enthusiasm for art would induce me possibly to neglect my "health, by over-exerting myself amongst the innumerable wonders of "the 'Eternal City.'

"Your kind letter of (I will not say what date), which had been so "long lying before me at home, I gladly made my companion here, "thinking to have so much leisure that I should be sure to answer it. "But instead of finding repose I have been completely overwhelmed "with correspondence, which has so fatigued me that, until this day, I "have not had an opportunity of taking pen in hand to your service. "As you say very truly, time has recorded serious charges against us "both since we met; but as you also say, and I agree with you, that "they are 'false' and 'envious;' the wound they give at the time leaves "no scar behind. Our friend got nothing by his move, for the question "was not whether the alterations ought or ought not to have been "made; but whether, having been made, they were executed in as "sound and workmanlike a manner as the circumstances of the case "allowed.

"I read your flattering and enthusiastic sentences with amazement, "and regret that I am unable to reply to them with the warmth and "energy they deserve; nevertheless, the sentiments they convey are "entirely congenial to my own ideas.

"You may possibly have heard that I have obtained the Lunatic "Asylum at West Derby (for that division of the county) to build, and "that my plans have been highly approved of by Her Majesty's Com- "missioners in Lunacy. I am also to do the Parish Offices at Liverpool "when they can decide upon a plan, which they have been about "eighteen months in doing, and kept me all that time pretty closely at "work with suggestions, alterations, and new committees (who undid "all their predecessors had accomplished), correspondence, &c., and "about eleven different plans.

"Mr. H. Earle's and Mr. Hornby's houses I think you knew of some "time since. I am also building a little house for the Mayor, at New "Brighton.

"H. L. E."

Soon after this letter, it became necessary for him to leave England, and Mr. Rawlinson, at his urgent request, consented to act as his deputy during his absence, Mr. Cockerell having consented to attend to all matters of architectural detail.

"KINGSTON, JAMAICA, Oct. 22nd, 1847.

"Our departure from Southampton was a most miserable day, thick "Scotch mist falling, which compelled upwards of 40 or 50 passengers "to stow themselves in the cabin of the small steamer which was to "take us to the 'Avon.' This place was about 14 feet square, and as "they kept us there upwards of an hour before starting, you may "imagine the state of the atmosphere, and the misery we were in. The "extreme fatigue I had undergone would have compelled me, under "any circumstances, to keep my bed for a day or two, and by so doing "I entirely escaped anything like sea-sickness. The officers on board "admitted that the first four or five days we had an unusually rough "passage; during the rest of the voyage it was occasionally rough, but "nothing in comparison to the Bay of Biscay. However high the "glories of the sea may be extolled,—and who as a patriot would not "extol them with a view to maintain our glorious independence?—yet "give me, personally, *terra firma*. I was told I should derive great "benefit from the constant exercise, 'without fatigue,' which the motion "of the vessel would give. I suffered fatigue, however, to a great "degree; and, as we approached the tropics, the heat of the cabins, the "tremulous motion produced by the engine, the entire absence of any "comfortable seat on deck, although we had between 70 and 80 pas-"sengers, rendered the whole of the voyage, with very few exceptions, "irksome and tedious, and I assure you I was heartily glad to get on "shore. Mrs. E. being laid up on our arrival, you may imagine I have "not spent my first week on shore very agreeably. I cannot say much "for our companions on board; a great many foreigners, one or two "agreeable Germans, but the rest sad-looking ruffians, chiefly Spaniards. "Our captain was exceedingly kind and attentive to us, and all the "officers were very pleasant nice fellows, which rendered it less uncom-"fortable than it otherwise would have been. We first touched at "Madeira, a most striking mountain rising abruptly from the sea. I "did not go on shore, being too unwell, but from what I heard and saw "I should not like it for a residence. Our next land was Barbadoes, "after a fortnight's voyage without sight of land, with a beautifully "smooth sea, the thermometer at 80 degrees, with a good awning over

"us; but we sighed in vain for the usual trade winds, and had none "but slight breezes against us. About 24 hours brought us to Grenada, "a remarkable and picturesque island, but with such innumerable un- "dulations, that the vast number of valleys, I think, must render it damp "and uncomfortable as a residence.

"I am inclined to hope strongly that the climate will agree with me, "though in this close town I find the heat in our sitting-room, with "every window open, 86 degrees, to be rather enervating.

"H. L. ELMES."

This pleasing anticipation, however, was not destined to be fulfilled; he died on Friday, the 26th of November, 1847, in the 37th year of his age, and England lost a worthy son.

Many instances have occurred of men of genius dying prematurely, and the fact that the age of 36 has proved fatal to at least four men of undoubted genius—Raphael, Burns, Byron, and Elmes—has led to a general impression that ardent devotion to intellectual pursuits, and the cultivation of the higher faculties of the mind, are unfavourable to longevity. But this is not the case, and architects, artists, men of science, and even poets, have a longer tenure of existence than the average of mankind. This is remarkably the case with regard to those long-suffering, much-enduring, and often scantily remunerated professors of the noble science of architecture. Of the eight architects whose biographies are written by Allan Cunningham, the average duration of life was 73 years, which is 23½ years longer than the average duration of existence. The great mortality that prevails among infants makes the average length of life not much more than 30 years, but taking the duration of life of those who have passed through the perils of infancy, and have attained the age of twenty, I find, by a reference to Inwood's tables, that they live, on the average, 29½ years beyond that period, making 49½ years the term of existence for the generality of mankind; but Bishop Williams of Wykham, Lord Chancellor of England under King Edward III, and who also enjoyed the

higher honour of being architect of Winchester Cathedral, attained the age of 80. Inigo Jones lived beyond that age, and Sir Christopher Wren, one of the greatest of architects, and physically one of the smallest of mankind, lived to be upwards of 90. Sir Robert Smirke, the architect of the Post-Office, London, died recently in his 94th year.

A most judicious critic and able architect, speaking of St. George's Hall, says—

"In regard to its situation, the building has been fortunate. "It occupies the most central position in the town, fronting "some of the most important thoroughfares, and surrounded "by an area sufficiently extensive to exhibit its proportions "to the best advantage. The immediate contiguity to the "Railway Station, which discharges its passengers directly "opposite to the principal front, contributes not a little to "the celebrity and fame of the building—the general effect "on a traveller just emerged from the darkness of the "tunnel being strongly, almost dramatically, picturesque. "Another advantage it possesses is that of size, absolute "bulk being a powerful element in the production of grand "and noble impressions. In this respect the building before "us stands almost, if not quite, pre-eminent amongst the "secular structures in the country. Our magnificent cathe-"drals derive their beauty from sources and associations of "an entirely different nature. Such palatial edifices as "Somerset House, or the British Museum, are rather clusters "of buildings, surrounding open courts, which the eye cannot "comprehend from any single point of view; so that there "are few buildings in the country, forming a solid mass "under one roof, which surpasses it in dimensions.

"The plan of the building is simple in its arrangements, "and is soon described. The centre is occupied by the Great "Hall, attached to which at each end, and opening therefrom,

"are the Assize Courts;—the hall filling the place of West-
"minster Hall to the London Courts of Justice, or the 'Salle
"des pas perdus' to the French Courts. A corridor encircles
"the hall and courts, communicating on the east side with
"the external portico, and having on the west side of the
"hall a range of subordinate apartments. The south end is
"terminated by a vestibule opening to the southern portico.
"The north end terminates in a semicircle, within which is a
"spacious loggia or entrance, above which on the upper story
"is placed the small concert hall. The corridors are repeated
"on the upper floor, from which access is gained to the
"galleries of the great hall, and to a range of apartments
"over those described above. The grand jury room is
"situated over the southern vestibule. These details, with
"the various staircases of communication, comprise the whole
"arrangement of the building above ground. It would be
"quite out of place to describe the labyrinth of passages and
"vaults in the lower regions, comprising the warming and
"ventilating apparatus, the steam-engine for working the
"organ bellows, the kitchens and cooking ranges, the
"prisoners' cells, &c.

"Returning once more to the exterior, let us contemplate
"the building in its south-eastern aspect.

"The first thing that strikes us is the clear indication
"afforded by the external elevation of the internal distribu-
"tion. The large central mass rising above the surrounding
"roofs clearly marks a spacious and lofty apartment within.
"This feature imparts massive boldness and dignity to the
"entire composition, and, by its extent of plain surface, gives
"that degree of breadth and repose which is essential in
"every great work of art.

"Some central feature is necessary in every large building
"to give unity of effect, and to concentrate the attention.
"This is often accomplished by a dome or cupola, but the

"result is too frequently that of dwarfing the sub-structure, "and robbing it of its just proportions. In the present case "this has happily been avoided. The central mass, in its "plainness and horizontality, forms a sufficient counterpoise "to the richness of decoration below and to the vertical lines "of the columns, without any painful predominance. It may "be mentioned, also, that another important element of "beauty—that of graduation—is developed from the cornice "upward, by the receding lines of the attic, forming an "intermediate step between the main order and the crowning "mass. The east portico, with its sixteen columns and its "lofty flight of steps, forms a promenade worthy of Greece "in her palmiest days. The open galleries on each side "with their square pilasters partially filled up below, are "novel in design and effective in the result. Of the southern "portico we shall have occasion to speak hereafter.

"It has been objected to the exterior, that each of the four "sides is dissimilar, thus marring the symmetry essential to "every classic structure. This objection, when carefully con- "sidered, does not appear to have much weight. Since the "eye can only command two sides at once, if each side be "symmetrical in itself, and not discordant with those which "may be seen in conjunction, the sense of harmony is fully "satisfied. The west front carries out more fully the appli- "cation of square detached pilasters or columns, the effect of "which is hardly satisfactory, their clumsy massiveness when "seen in perspective being anything but pleasing. Exception "has been taken to the curved lines of the northern end as "being out of keeping with the other parts of the design, "but, as it appears to us, without sufficient cause. If an "excrescence, it is a graceful and elegant one, and needs no "apology for being where it is.

"The exterior of the building generally, bears unmistake- "able marks of genius in its conception. Roman in the style

"and order selected, the refinement of its details is suggestive "of the noblest period of Grecian art. On the whole the "result may be pronounced one of the most successful efforts "of modern times.

"We will now proceed to make a few remarks on the "architecture of the interior, and regret that the same meed "of praise cannot here be awarded. The arrangement of the "plan is in the last degree objectionable. A large hall, of "the imposing dimensions of the one under consideration, "should be approached through a noble vestibule. The "principal entrance should be at the end, that the fullest "perspective effect may be obtained, and that the first impres- "sions may be of the most striking character. In the present "instance all experience of this nature has been entirely "ignored. From the lofty grandeur of the eastern portico "we enter by what appears externally a door of imposing "proportions, but which is in reality a huge sham. We find "ourselves in a low, narrow, and dark corridor, crossing "which we immediately enter the great hall on one of its "sides. The æsthetic effect is extremely bad, and the prac- "tical inconvenience is so great that it is impossible to use "the eastern entrances on any public occasion. The southern "access is still worse. The external portico is only approach- "able by a small portion of one end. We have here before us "a still greater sham than on the eastern side. An immense "door, with elegant architectural decorations, promises to "open upon an equally imposing interior; but alas! the "only moveable portion of the door is a low-browed wicket, "which gives access to a moderate-sized vestibule, the ceiling "of which is about half the height of the doorway—the 'dim "'religious light' serving little more than to make darkness "visible. From this the visitor has to grope his way, right "or left, through a series of dark, narrow, and tortuous "passages, till he finds himself entering the hall by the same

"doors as those above described, or corresponding ones on "the western side. The southern entrance is thus for all "public purposes utterly useless, and is accordingly never so "employed. Under these circumstances, the only available "access is by the north end, which is the one commonly used "on public occasions. The vestibule itself is spacious and "handsome, though somewhat deficient in height, but the "external doorways are narrow and mean. In this magnifi- "cent building, erected for all time, regardless of cost, to this "complexion are we come at last,—that with two of the finest "porticos and *quasi* entrances in the kingdom, our only "available means of access for the public is by three door- "ways on the basement floor, no larger than a common house "door, without a particle of shelter. The great hall in itself "is worthy of the external design, in grandeur of conception "and beauty of detail. The material, in its rich costliness, "contributes much towards heightening the effect. The "polished red granite columns—the marble and alabaster "balustrades—the bronze gates—the encaustic tiled floors— "combine, with the richly decorated vault, to produce a "splendour of effect which enhances the greatness of its "architectural proportions. Much of the interior design is "from the pencil of Professor Cockerell, R.A., to whom the "completion of the building was entrusted after the lamented "death of the architect.

"The two assize courts are rooms about 60 feet square, "well adapted for their purposes in point of arrangement. "Unfortunately their acoustic properties have proved in- "curably defective, after many attempts to remedy them. "The same may be said of the great hall, where probably the "defect was unavoidable from the nature of the construction.

"The small concert hall on the upper floor is quite a gem "in its arrangement and decorations. The plan is semi- "circular, with a light gallery round. The taste displayed in

"this apartment reflects the highest credit on Mr. Cockerell,
"from whose designs it was completed. Its acoustic proper-
"ties are remarkably good.

"Before concluding, allusion may be made to the vault
"over the great hall, executed in brick, with a span of 80
"feet. It is a daring piece of construction, and has succeeded
"admirably.

"We here close our remarks on this building, which, with
"some defects of plan, is the architectural glory of Liverpool,
"and one of the greatest triumphs of art in modern times."

The difficulties and the defects here touched upon appear to me to be inseparable from the style of architecture that was determined on. Vitruvius says, that the three chief excellencies of a building should be strength, beauty, and convenience; and though nothing can surpass the strength or excel the beauty of St. George's Hall, yet nothing can be more unsuitable for the conveniences and requirements of the present age than the style of architecture which was absolutely required for a heathen temple. The exteriors, indeed, were surpassingly beautiful, but the interior was merely a dark receptacle for the worship of the statue of an idol. The adoption of this style of architecture, which, carried out in its so-called purity, entirely forbids the introduction of windows, or fenestration as it is technically termed, imposed restraints and difficulties which even the genius of Elmes struggled with in vain. He was obliged to give way, and the consequence is, that though three fronts of St. George's Hall are without windows, he was obliged to introduce them in the western front, sacrificing thereby the unity of the design, or otherwise the magnificent Hall, and all the various offices in connection with the assize courts would have been in total darkness. But, though no style presents greater difficulties to the architect than the strictly

Grecian, in its adaptation to the practical requirements of modern existence, either public or domestic, perhaps no architect ever struggled with them more energetically or more successfully than the subject of this memoir.

My personal reminiscences of Mr. Elmes are but few and slight, and, except for the last accidental interview that I had with him, would be scarcely worth recording. Mr. Elmes frequently called at the Town Hall, to arrange incidental matters that arose between himself and the then Corporation Surveyor, Mr. Franklin, the architect of Dr. Raffles' Chapel, and under whom I was then the principal architectural draughtsman. The Council had directed their Surveyor to make designs for building the Police Offices, since erected in Dale Street, on the former site of Islington Market, and where now stands the Wellington Column. One feature of the designs I recollect well, having drawn them out, under Mr. Franklin's directions, with my own hand, was a magnificent circular portico at the west end of the building, which Mr. Elmes, in a conversation I had with him when we were looking over the plans together, objected to, on the ground that, as the northern end of St. George's Hall had a circular portico attached, and would be seen in immediate juxtaposition with the proposed circular portico of the police courts, there would be too much uniformity of design, and that one portico would clash with and injure the effect of the other. But the intention of erecting the Police Offices on that site was ultimately abandoned. I left the Town Hall, and entered into business as a contractor, and saw nothing of Mr. Elmes for a long time, till I met him accidentally at the Athenæum. This was a short time previous to his departure for Jamaica, and he was in a very low state of physical and mental depression. He complained bitterly of the opposition he had had to encounter in the objections of influential men, who called themselves practical, to the construction of the great vaulted

roof of the hall, of which they predicted the failure; and the iron of this opposition seemed to have sunk into his soul. The arched roof, however, notwithstanding strenuous opposition and sinister predictions, has been executed, and gives now, after the trial of above 20 years, not the slightest symptom of giving way, and may now be considered as safe, except from the shock of earthquakes, or the destructive fire (which Heaven avert) of modern artillery. The interview gave me the deepest pain, for Death seemed to have set his stamp on his attenuated features, and I parted from him with melancholy forebodings, which were but too soon realized. The well-known lines of Byron on the death of Kirke White are especially applicable to Elmes:—

"Oh! what a noble heart was here undone,
When Science self-destroyed her favourite son;
Yes, she too much indulged the fond pursuit,
She sowed the seed, but Death has reaped the fruit;
'Twas thine own genius gave the fatal blow,
And help'd to plant the wound that laid thee low.
So the struck eagle, stretch'd upon the plain,
No more through rolling clouds to soar again,
Viewed his own feather in the fatal dart,
And winged the shaft that quiver'd in his heart.
Keen were his pangs, but keener far to feel
He nursed the pinion that impell'd the steel;
And the same plumage that had warm'd his nest,
Drank the last life-drop of his bleeding breast."

MEDIÆVAL SIGNACULUM OF SAINTS EDWYN AND ECGWYN.*

Supplemental and Correctional Note.

By Henry Ecroyd Smith.

This remarkable relic, having become known to an enlarged circle of antiquaries and students of our national history, has excited no little interest in many quarters, resulting in my receipt of several communications of value, some in further elucidation of the subjects broached, whilst others are corrective of statements obtained, in most instances, from well-known authors, and held to be reliable. I gladly avail myself of the opportunity to place these additional remarks where they will be published contemporaneously with the original paper, rather than insert a separate communication in a succeeding volume.

Upon good authority I am assured the Holy Chrism is not, neither has ever been, used in the rite of Extreme Unction; likewise that no evidence exists to show that the signs termed Ampullæ were ever used to *contain* this holy oil. In fact there appears strong ground for doubting their special connection with the sacred vessel at Rheims. From a very early period in the history of the Christian Church, down to our own times, a custom has prevailed of abstracting oil from the lamps sustained before the tombs of martyrs, and the shrines of confessors and virgin saints, for devotional purposes. When occasion required the transmission of such oil to any distance, it was enclosed in phials of *glass*. A less fragile material was, however, necessary for the use of pilgrims who often collected the oil at every shrine they reached in the course of their journeyings. Hence lead or pewter came to be employed for these receptacles. The use of this variety of Pilgrims' Signs proves to have been by no means confined to France and England, inasmuch as several of those pub-

* *Vide* p. 165.

lished by Mr. Roach Smith bear an unmistakably Byzantine character. Though, perhaps, generally manufactured and sold at the shrines chiefly resorted to by pilgrims, examples exist which conduce to a belief in their occasionally being made for the devotees of consequence, instance those in the collection of M. Forgeais, at Paris,* impressed with the arms of Charles VI and his Queen, Isabel of Bavaria, the Dukes of Orleans and Burgundy, the Constable Du Guesclin, and other persons of rank. One, published in the *Archæological Journal* some years ago, bears a crowned W, thus likewise betokening a personal character and a special manufacture.

In addition to Mr. Roach Smith's notices of kindred relics, some interesting information is supplied by the Rev. Thomas Hugo, M.A., in a communication to the Society of Antiquaries, entitled "Notes on a Collection of Pilgrims' Signs, "of XIII, XIV, and XV centuries, found in the Thames," and published in the *Archæologia*, Vol. xxxviii, p. 128.

In connection with the extract from "*The Vision of Piers "Ploughman*," it appears that the pilgrim really bore by his side a *bowl* and a bag, and a hundred of ampuls, upon his hat being set signs of Sinai and shells of *Galicia* (from the shrine of St. James of Compostello); his cloke was studded with *crosses*.

St. Paulinus.—Baines incorrectly states this missionary and first bishop of York to have been exiled from Northumbria in 625, this being the year in which he was consecrated; his banishment from the kingdom dates from 633 to 635.

St. Edwyn.—The battle in which Edwyn lost at once his army and his life, has in designation been confused by some writers with the victory achieved by his successor, Oswald, near Hexham. There can, nevertheless, be little doubt that Hatfield Chase near Thorne and Doncaster, anciently called Hœthfelth, is the veritable scene of the frightful carnage consummated by Cadwallo and Penda. Broken swords and

* *Revue Archæologique*, 1861; *Mai*, p. 388.

other relics of the encounter have been found at a considerable depth by peat cutters.

St. Ecgwyn, "Bishop and Confessor."—The latter title has no connection with the rite of confession of sins; it designates one who has suffered much for the Church, *short of death.*

I have continued the orthography of the names of the last-named Saints, selected as believed to be the correct Saxon. Diversity of opinion exists, more especially as regards Ecgwyn. It is contended that *Eadwine* and *Ecgwine* can alone be correct, *wyn* and *wine* (the former meaning friend, the latter joy) being perfectly distinct elements of the language. In the following remarks, which he very courteously allows of my quoting, the latter name is alluded to among other points of historic interest and value, by the Rev. D. H. Haigh,—

"The *Vita-per Brithwaldum Monachum Glastoniensum*, "*Anno* 731, I had hitherto regarded as originally contemporary, but containing additions of the time of King Edgar. "*Now*, having read it again, I am convinced that it is entirely "of the latter time, but probably founded on an earlier work. "I do not, therefore, regard it as of such authority as I once "did, and discard the spelling of the name (Ecgwyn or "Ægwyn). In one part, what regards the vision and the "foundation of Evesham, the bishop is introduced speaking "in the first person, and this I think may be derived from a "writing of his own. The most important documents for his "history are the commendatory letters of Pope Constantine "and the Charter of Cœnred and Offa, documents the genuineness of which I do not see any ground for disputing. Written "in Rome, but under the auspices of two English kings, "and intended to have effect in England, it is by no means "surprising that they are attested after the English custom. "Both are dated in A.D. 709, at Rome, and signed by the "Pope, St. Ecgwine, Cœnred, and Offa. Both allude to the "vision. The former states that St. Ecgwine had visited "Rome in a previous year. In the latter Cœnred says that "they had travelled to Rome together in 703. This is very "important. We only know from *Ven. Beda* that Cœnred "went to Rome in 709, and that he became a monk and died "there. But the *Vita* states that Cœnred and St. Ecgwine

"*went to Rome and returned together.* This would be "true of the earlier journey, and there are circumstances "which render it probable that this took place in 703, as "Cœnred's accession is usually dated in 704, the date of the "abdication of Æthelred. But three MSS of the *English* "*Chronicle* state that Cœnred became king of the Southum-"brians in 702, and these, with all the rest, record his "accession to the kingdom of the Mercians in 704. He was, "therefore, consistently with the statement in the *Vita*, king "in the year in which the charter says that they visited "Rome, and I think that Æthelred's abdication in his favour, "immediately followed his return. Further it is said that "St. Wilfrid consecrated Evesham. St. Wilfrid returned "from his last Roman journey in 704, and remained in "Mercia until 705, because he was forbidden to enter North-"umbria. Æthelred, his friend, was still king, but on the "point of retiring, having chosen Cœnred his successor. The "fact that St. Wilfrid had exercised metropolitan authority "in Mercia in former years, when banished from his own "diocese, accounts for his having officiated as metropolitan "at the consecration of Evesham in the presence of the "metropolitan of Canterbury. It seems to me clear, there-"fore, that the consecration of Evesham occurred in 704. "The legend on the seal says 'three kings gave gifts' on "the occasion. These would be Æthelred, Cœnred, and "Æthelheard king of the Hwiccas (people of the district now "called Worcestershire); they are represented sitting together."

Seal of Evesham Abbey.—Since the publications of Dugdale and Tanner, early impressions in sufficient number have been discovered to enable sigillarists to effect a complete restoration of this remarkably curious seal. The inscription around the herdsman and his house, on the reverse, reads correctly thus—

"EOVES . HER . WONEDE . ANT . WAS . SWON .
FORPI . MEN . CLEPET . PIS . EOVISHOM ."

The modern English of which is simply—

"Eoves here dwelt, and was a swain,
Therefore, men call this Eovisham."

The Latin circumscription proves to be, "DICTIS . ECGWINI . "DANT . REGES . MVNERA . TRINI . OMNIBVS . VNDE . PIE . "NITET . AVLA . SACRA . MARIE ."

PROCEEDINGS,

TWENTY-FIRST SESSION, 1868-69.

ANNUAL GENERAL MEETING,

Royal Institution, Colquitt Street, Liverpool, October 19th, 1868.

THE REV. DR. HUME, IN THE CHAIR.

The Minutes of the Meetings held on May 28th and July 30th, were read and approved.

The SECRETARY read the following

REPORT.

The close of the Session 1867-68 completes the second decade of the Society's existence, and the Council are gratified to find that, after twenty years which have elapsed since its formation, the objects for which it was established still continue to excite interest, and notwithstanding the great changes which have taken place in the physical and social aspects of Lancashire and Cheshire during that period—the extension of railways causing residences to be multiplied in the suburban districts, and the rapid spread of cheap literature superseding in a great measure the necessity for oral discussion in the various societies—the Historic Society has steadily maintained its regular course of Meetings, and the Papers contributed by its Members are as numerous and important as heretofore. During the past Session thirteen Meetings have been held, at three of which a large number of the Friends of Members, including Ladies, have been present. Thirteen New Members have been elected during the Session, and eighteen Papers have been read. Twelve of these will appear in the forthcoming Volume, which is now nearly ready for distribution. These Papers will be illustrated with Lithographs and Woodcuts, equal, it is believed, to any that have hitherto appeared in the Society's Volumes.

The alteration which was made last year in the Constitution of the Society by the abolition of the Sectional Divisions, has been carried out. The purposes for which it was effected were to enable the business of the Society to be conducted more efficiently, and to the greater convenience of the Members of the Council and Committees.

The removal of the Society's place of Meeting to the Royal Institution has, it is believed, proved more convenient to the Members generally.

The Treasurer having been empowered to dispose of the large Bookcase which formerly contained the Society's Library, and which

it was found inconvenient to remove to the Royal Institution, has disposed of the same to the Library and Museum Committee of the Corporation. At the suggestion of a Member, application was made to the Museum Committee of the Town Council, that objects of antiquarian interest, presented to the town, might be lent for exhibition at the Society's Meetings, and the Museum Committee have, with the restrictions deemed necessary to secure the safety of the objects lent, acceded to the request.

The Council have decided to recommend the appointment of Local Secretaries, in various parts of the two counties, to extend and maintain, in their respective districts, the operations of the Society. The following gentlemen have agreed to act in that capacity—Mr. Charles Hardwick, Manchester; Mr. Thomas Newbigging, Bacup; and Mr. T. G. Rylands, Warrington.

The Council have pleasure in announcing that several important Papers have been promised for the next Session, to which they look forward with much interest, and they urge upon the Members generally to assist in promoting to the utmost the usefulness and prosperity of the Society.

The Report was unanimously adopted.

The Meeting then proceeded to the election of the Officers and Council for the ensuing year, and the result was stated from the Chair, as shown on page iv.

On the motion of Mr. GENN, seconded by Mr. FORREST, the Meeting was adjourned till after the First Ordinary Meeting in January, for the reception of the Treasurer's Accounts.

On the motion of Mr. GENN, a unanimous vote of thanks was passed to those who have contributed Drawings and Woodcuts for the current Volume of Transactions.

November 19th, 1868.

JOSEPH MAYER, F.S.A., President, in the Chair.

The following objects of interest were exhibited:—

By Mr. T. J. Kilpin.
A playbill, dated 1783.

By Mr. Mayer.
A collection of bronze and terra cotta objects, in statuettes and coins, collected by Dr. Storr, of Liverpool, during a recent visit to Egypt, and presented by him to the Liverpool Museum.

By Mr. Wordley, in illustration of the Paper of the evening, a number of sketches and drawings by the late Mr. Elmes, Architect.

The following Paper was read:—

A BIOGRAPHICAL SKETCH OF THE LATE H. L. ELMES, ESQ., ARCHITECT OF ST. GEORGE'S HALL, &c.,* *by T. J. Kilpin, Esq.*

* Transactions, p. 233.

December 3rd, 1868.

T. J. KILPIN, Esq., in the Chair.

The following gentlemen were duly elected Ordinary Members of the Society :—

Mr. Henry Boyle.
Mr. John Cape.
Mr. J. M. Walthew.

The following objects were exhibited :—

By Mr. Brown Thompson.
1. A portion of an early stone hatchet or other instrument, found at Chat Moss.
2. A half shilling of Elizabeth, dated 1580.

By Mrs. E. M. Humphreys and Mr. John Jones, of Abergele.
Five Roman culinary vessels in bronze, in illustration of Mr. Henry Ecroyd Smith's Paper on that subject.

By Mr. William Keith.
Specimens of photographic copies of works of art taken by the process called "Autotypography." Its chief characteristic is that the pictures do not fade, and partake of the colours of the originals.

By Mr. Henry Ecroyd Smith.
An impression in wax of the seal of St. Margaret, made in the 14th century; also several coins of Scotland.

The following Paper was read :—

A NOTICE OF ROMAN BRITISH CULINARY VESSELS FOUND IN NORTH WALES,* *by Henry Ecroyd Smith, Esq.*

December 17th, 1868.

HENRY DAWSON, Esq., in the Chair.

The following Paper was read :—

OBSERVATIONS ON POPULATION STATISTICS,† *by T. A. Welton, F.S.S.*

January 14th, 1869.

JOSEPH MAYER, F.S.A., in the Chair.

The following objects were exhibited :—

By the Rev. Dr. Hume.
A halfpenny token, inscribed "Peter Atherton, his halfpenny, "1668."

* Transactions, p. 19. † *Ibid.*, p. 55.

By Mr. Mayer.

1. A penny token, dated 1666, bearing the name of "Samuel "Rathbone."
2. Part of a signet ring, bearing an inscription on the intaglio, "I am the seal of honourable love."

The following Papers were read:—

ON THE SO-CALLED "PETRIFIED HUMAN EYES," FOUND AT ARICA, PERU,* *by the Rev. Dr. Hume.*

THE GAINS AND LOSSES IN HISTORIC PROGRESS,† *by David Buxton, F.R.S.L.*

THE HISTORIC SOCIETY OF LANCASHIRE AND CHESHIRE *in Account with*

Dr. JOHN G. JACOB, *Treasurer.* *Cr.*

	£	s.	d.		£	s.	d.
I. THE VOLUMES:—				By Balance, last Account	56	14	8
Delivery, Vol. VII, N.S.	£5	5	8	„ Receipts in Session XX, viz.:—			
Printing Vol. VIII, N.S.	106	3	3	Arrears	31	0	2
Ditto ditto	3	15	6	Entrance Fees	5	5	0
Riby and Williams	4	12	0	Annual Subscriptions, Sess. XX	140	11	10
Jas. Lawson	18	2	0	Book Covers and Diplomas	0	3	0
			134 18 5	Sale of Bookcase	60	0	0
II. SESSIONAL EXPENSES:—							
Printing and Posting Circulars, &c.	16	1	6				
Clerk Copying Laws	0	12	6				
Insurance	1	8	0				
Mrs. Johnson (Refreshments)	13	3	0				
S. Burke (Attendance)	2	17	0				
Rent of Rooms	10	10	0				
Assistant Secretary	25	0	0				
Postage Stamps	1	7	1				
Ditto ditto	1	13	0				
Collector's Commission	5	3	1				
Miscellaneous Expenses	1	9	1				
Stationery	2	12	9				
			81 19 6				
III. SPECIAL EXPENSES:—							
Fitting up Book Cases	33	0	0				
Printing Laws	2	12	0				
Excursion	1	10	11				
			37 2 11				
			214 9 10				
Balance carried down			39 13 10				
			£293 14 8		£293	14	8

By Balance brought down £39 13 10

Liverpool, 18th October, 1866.

E. & O. E.

Examined, (Signed) JOHN G. JACOB, *Treasurer.*

(Signed) PETER R. M'QUIE, E. F. EVANS, } *Auditors.*

* Transactions, p. 225. † *Ibid.*, 219.

January 28th, 1869.

JOSEPH MAYER, F.S.A., President, in the Chair.

The following objects were exhibited:—

By the Rev. W. Pope, of Oxton.

A curious painting, on glass, representing three female figures, supposed to be Court Beauties of the reign of George III.

By Mr. Thomas Edwards.

An early English cauldron or boiler, in bronze, found in the Spring of 1846 near Rhuddlan Castle, in the Vale of Clwyd.

By Dr. Kendrick, of Warrington.

1. A brass ewer or lavatorium, in the form of a lion; probably of the 14th or 15th century.
2. Two examples of mediæval seals, in which the impression of the teeth are left in the wax; one of which is of the date 1520, and the other temp. Edward II.
3. Seven specimens of Samian ware and a terra cotta lamp, found at the Roman station of Condate, near Warrington.

The following Paper was read:—

ON THE LAST POPULAR RISING IN THE LANCASHIRE LAKE COUNTRY,* *by A. Craig Gibson, F.S.A.*

February 11th, 1869.

JOSEPH MAYER, F.S.A., President, in the Chair.

Mr. Stephen Amer, Bridge Street, Birkenhead, was duly elected an Ordinary Member of the Society.

The following objects were exhibited:—

By the Rev. Dr. Hume.

1. A pair of beautiful "alforjas" or saddle-bags, manufactured in Peru, of native cotton. They had been woven in the native frame, not in the loom, and were probably made for presentation, not for use.
2. One of twenty clay vessels found in the graves of the dead, at Peru. This vessel was of the shape of a gourd and of that colour, with a monkey for the handle, and a white ribbon running round it ornamented with flying-fish.

By Mr. Mayer.

A mediæval seal of an oval form, with a small loop at the back to enable the wearer to attach it to his person. It has an antique intaglio in the centre, formed of cornelian, on which is engraved a seated figure of a female representing the Goddess of Peace, bearing in her right hand an olive branch; at her feet are two lions. The stone is set in a broad massive silver margin, on which is sharply cut "SIGILL . PHILIPPI . PVLE." From the form of the characters it is thought to have been made about the 14th century.

* Transactions, p. 45.

The following Paper was read :—

ON THE POLITICAL ECONOMY OF GREAT BRITAIN—PUBLIC EXPENDITURE, *by B. L. Benas, Esq.*

MISCELLANEOUS MEETING.—*February 25th*, 1869.

JOSEPH MAYER, F.S.A., President, in the Chair.

The following objects were exhibited :—

By Mr. F. M. Youd.

A pair of enamelled vases, from the Summer Palace, Pekin, of 16th century; enamelled hand-basin, from the Summer Palace; enamelled birds, from Pekin; incense vase, from Pekin; hand-baskets, from Nangasaki, Japan; metal mirror, from Osaka, Japan; silver flowers, from the Province of Foh Kien, China; Chinese shoes of common use, Japanese cabinet, bamboo-cane boxes, Chinese manufactured silks and embroidery, and a number of Japanese and Chinese books.

By Mr. F. J. Jeffery.

A set of French medals, in bronze.

By Mr. H. Ecroyd Smith.

1. A drawing of the central portion of the unrivalled Mosaic forming the floor of the Antrium, the house of Marcus Tullus, Pompeii.
2. Barrel-shaped vessel of uncertain use, found in the gravel drift at Powka Beck, near Irleth-in-Furness, about the year 1860.
3. In illustration of his Paper—two casts of the seals of the Abbey of Evesham, each portraying St. Ecgwyn's interview with the Virgin.

The following Papers were read :—

NOTICE OF A MEDIÆVAL SIGNACULUM OF THE ANGLO-SAXON SAINTS EDWYN AND ECGWYN, LATELY FOUND IN THE NEIGHBOURHOOD OF PRESTON,* *by Henry Ecroyd Smith, Esq.*

OVER THE RUINS OF POMPEII, AND UP VESUVIUS, IN 1868, *by Thomas Gibson, Jun., Esq.*

Mr. Gibson's Paper was illustrated with several large photographs, coloured map, and stereoscopic views.

March 11th, 1869.

JOSEPH MAYER, F.S.A., President, in the Chair.

The following objects were exhibited :—

By Major Egerton Leigh, of Jodrell Hall, near Holmes Chapel.

1. A silver ring, of Irish filagree work of a very early period.
2. A roundell of jet, with curious carvings on both sides.

* Transactions, p. 166.

By Mr. H. Ecroyd Smith.

A small trouvaille of English shillings, lately discovered in the thatch of a house, one of the oldest tenements in Formby. They comprised pieces of four reigns, viz., one of Elizabeth, three James I, fourteen Charles I, and one Charles II. From their condition they are supposed to have been secreted two centuries ago.

By the Rev. Dr. Hume.

Three curious clay vessels, from the graves of the dead at Arica.

The following Paper was read :—

On Population Statistics, No. II,* *by Thomas A. Welton, F.S.S.*

March 25th, 1869.

Joseph Mayer, F.S.A., President, in the Chair.

The following objects were exhibited :—

By Mr. Blundell.

The skin of a remarkably large boa constrictor, brought to this country by Mr. Chappius, chief officer of the African Mail Steamer "Ethiope."

By Mr. F. J. Bailey, M.R.C.S.

1. A Bible of the reign of Charles I.
2. A Prayer Book of the reign of Elizabeth.

The following Paper was read :—

A Biographical Sketch of the late William Everard, Esq., Architect and Surveyor, Born 1725, Died 1792, *by T. J. Kilpin, Esq.*

Mr. Kilpin exhibited, in illustration of his Paper, a number of family relics of the late Mr. Everard, consisting of china, glass, pictures, wearing apparel, &c., lent by Mr. Storey and the Misses Lord.

April 8th, 1869.

Joseph Mayer, F.S.A., President, in the Chair.

The following objects were exhibited :—

By Mr. H. Ecroyd Smith.

Various small objects, lately found at Walton-on-the-Hall by Masters Thomas and William Green, including a halfpenny token of a Bristol tradesman about 1660, and a Maunday twopenny piece in good condition.

* Transactions, p. 93.

By Messrs. W. Wynne Ffoulkes (of Chester), Charles Potter, and H. Ecroyd Smith, objects in illustration of the Paper of the evening.

Objects found upon the sea beach of Cheshire, with cremated human remains from the site of the Roman objects; a Roman brass coin of Claudius found at Parkgate; and a brass seal of the Consistory Court of St. Asaph, bearing an earlier date than is recorded upon any published example, viz., 1571.

By Dr. Kendrick, of Warrington.

An oval plaque of horn, lately met with in a house at Burton, beautifully engraved with a bust of Charles I, below which is an eagle in a small medallion. Duplicates of this production were given by Charles I to his followers, but only two others are known to be in existence, one of which, now in the British Museum, was found in the pocket of James II after his decease.

The following Paper was read:—

ARCHÆOLOGY OF THE MERSEY DISTRICT, 1868,* *by H. Ecroyd Smith.*

ANNUAL EXCURSION.

The Annual Summer Excursion was made on Monday, June 21st, 1869, the locality chosen being Lichfield. The party, numbering about one hundred and twenty Members and their friends, including ladies, left Lime Street station soon after nine o'clock, arriving at Lichfield at noon. Much interest was excited by an inspection of the Cathedral and other public buildings, including the house in which Dr. Johnson was born; and the visitors were further gratified by inspecting the foundations of the palace of the former bishops of Lichfield, recently discovered in the New Palace Gardens, these foundations being courteously explained by Mr. Selwyn, son of the present bishop. At the dinner, which preceded the visit to the cathedral, the Chair was occupied by Joseph Mayer, F.S.A., President of the Society—the Rev. Dr. Hume, David Buxton, Esq. and John G. Jacob, Esq., filling the Vice-Chairs. The Mayor of Lichfield was also present, and kindly exhibited to the visitors the ancient mace and other antique insignia of office, which were of very curious and elaborate workmanship. The Excursion was rendered the more interesting from the fact that it occurred on the twenty-first anniversary of the Society's existence, which fact was suitably adverted to by the Rev. Dr. Hume, and other speakers. After tea, the party returned to Liverpool, the Excursion having been one of the pleasantest on record.

* Transactions, p. 199.

DONATIONS TO THE LIBRARY.

Ante-Nicene Christian Library, vols. vii to x; from R. A. Macfie, Esq., M.P.

Annual Report of the Directors of the Liverpool Institute.

Biographical Memoir of James Dinwiddie, LL.D.; from the Author, W. J. Proudfoot, Esq.

Boston Society of Natural History. Memoirs, vol. i, part 3. Report, 1867-68. Proceedings, vol. xii.

British Antiquities: Illustrations from Objects found in South America; from the Author, Rev. A. Hume, LL.D., D.C.L., &c.

Catalogue of Antique Greek and Roman Medals, comprising the Cabinet of M. Badeigts de Laborde.

Cambridge Philosophical Society. Transactions, vol. x, part 2; vol. xi, part 1.

Collectanea Antiqua, parts iii and iv; from C. Roach Smith, Esq.

Coal: An Enquiry into Its Extent, Duration, Consumption, and Appliances, with Remarks on Steam Engines and Steam Boilers; from the Author, Thomas Storey, Esq.

Folk Speech: Tales and Rhymes of Cumberland; from the Author, A. Craig Gibson, F.S.A.

Genealogical Chart of the Ex-Royal House of Bourbon; from the Compiler, F. J. Jeffery, Esq.

Historical and Archæological Society of Ireland, vol. i, third series.

Inaugural Address to the Compton House Literary and Debating Society; from F. J. Jeffery, Esq.

India; Future Policy of (Knighton); from C. Roach Smith, Esq.

Institution of Engineers of Scotland. Transactions, vol. for 1868-69.

Kilkenny and South-East of Ireland Archæological Society. Proceedings, No. 56, vol. vi.

Liverpool Polytechnic Society. Journal.

Liverpool Polytechnic Society. Proceedings, Thirty-first Session.

Liverpool Chemists' Association. Transactions, 1867-68.

Liverpool Architectural and Archæological Society. Proceedings, Twenty-first Session.

London and Middlesex Archæological Society. Transactions, part 9, vol. iii.

Numismatic Society, Manchester. Proceedings, vol. vi.

Philosophical Society of Glasgow. Proceedings, 1867-68

Prospectus of the Imperial Insurance Corporation, prepared by Dr. Farr.

Royal Society. Proceedings, Nos. 106-109, vol. xvii.

Royal Asiatic Society, part 2, vol. iii.

Shakespeare: His Birthplace; from the Author, C. Roach Smith, Esq.

Society of Arts. Journal, Nos. 833, 848, 854.

Society of Antiquaries, London. Papers and Proceedings, part 2, vol. xli.

Society of Antiquaries of Scotland. Proceedings, vol. vi, with Appendix.

Statistical Society of London. Proceedings, vol. xxxi, part 4; vol. xxxii, part 1.

Sussex Archæological Society. Quarterly Journal.

Sussex Archæological Society. Proceedings, vol. xx.

The Feudal Barons of Powis; from the Author, M. C. Jones, Esq.

Yorkshire Archæological and Topographical Society, Transactions, part 1.

INDEX.

A

Abbey of Evesham, 262
ADDRESS TO THE MEMBERS OF THE HISTORIC SOCIETY OF LANCASHIRE AND CHESHIRE, by Joseph Mayer, F.S.A., &c., 1
Alforjas, or saddle-bags of Peru, 261
Ampulla, The, described, 167
Amer, Stephen, 261
Ancient Metallic Arms and Utensils, observations on, by George Pearson, M.D., F.R.S., quoted, 29
Annual Excursion, 264
Annual General Meeting, 257–8
Antiquities (Later English) found on the Cheshire Shore, 1868, 216
Archæology, progress of, 2
Arts, rise and decadence of, 220
Archæology, American, 8
ARCHÆOLOGY IN THE MERSEY DISTRICT, 1868, 199
Atherton, Peter, half-penny token of, 259
Autotypography, 259

B

Balance Sheet, Session XX., 1867-68, 260
Bailey, F. J., M.R.C.S., 263
Births, statistics of, 105
Blundell, Mr., 263
Blackmore, Mr., purchase of Squier and Davis's Museum by, 7
Boyle, F., author of paper, 181
Boyle, Henry, 259
Boa Constrictor, skin of, 263
Brass coin of Claudius, 264
Britannia, origin of the name attributed to the production of tin in the country, 33
Bread Riots in the Lake District, in 1799-1800, 46
Bronze and Brass, manipulation of in early ages, 36
——— and terra cotta objects, found in Egypt, 258
Brass ewer or lavatorium, 14th century, 261
Buxton, David, F.R.S.L., author of paper, 219

C

Cauldron, early English, 261
Cape, John, 259
Children, statistics of, employed in labour, 110
Cheshire, archæological produce of, 1868, 217
Christmas carols, 219
Chinese manufactures of objects of art, 262
Circleville (America) mounds of, 10
Cuttle fishes, eyes of, found in the graves of the dead, at Peru, 232

D

Dawson, Henry, 259
Denmark, statistics of population of, 111

E

Ebn-Haukal (Arab geographer), notice of, 185
Ecgwyn (Saxon Saint), notice of the life of, 172
Edwyn (Saxon Saint), notice of, 172
Edwards, Thomas, 261
Egyptian hieroglyphics, art of reading, 12
Elmes, the architect of St. George's Hall, Liverpool, 233; correspondence with Rawlinson, 237; sketches and drawings of, 258; account of his voyage to Jamaica, 243
Emigration, effects of, 102
English people, occupations of in 1861, 72
England and Wales, movement of population of, 138; mortality in, 114; suggested statistical divisions of, 130
Evesham Abbey, seal of, 256

F

Faculties, decay of, from want of exercise, 222
Family records, desirability of a depository for, 17
Faversham (Kent), excavations at, 15
"Fausset Collection" no longer unique, 14
Ffoulkes, W. W., 264
Food, dearth of in the Lake District, in 1799 and 1800, 46
French medals, 262

G

Geographical Society, need of in Liverpool, 197
Gibson, A. C., F.S.A., author of paper, 45, 261
——— Thomas, jun., 262

H

Half-shilling of Queen Elizabeth, 205
Halfpenny token, 1660, 263
Hionen-thsang, voyage of, 629 A.D., 183
Hoylake, inaccuracy of Poole's *Guide* to, 206
Hume, Rev. A., D.C.L., F.S.A., &c., author of paper, 224
Humphreys, Mrs. E. M., 259

I

Ibn-Batuta, travels of (1324), 184
Immortality, ideas concerning, by the Indians of South America, 230

J

Japanese objects of art, 262
Jones, J., of Abergele, 259

K

Kilpin, T. J., author of papers, 233, 258, 263
Kendrick, Dr., 261
Keith, William, 259

L

Labour, subdivisions of in England and Wales, 59
Lancashire and Cheshire, statistics of population of, 145
Leigh, Major Egerton, 262
London, mortality in various parts of, 116; density and increase of population in, 132; statistics of persons residing, but not born in, 112

M

Malay language, 192, 193
Manufactures, number of persons engaged in, in England and Wales in 1861, 79
Mayer, Joseph, F.S.A., author of paper, 1 ; 258, 262
Marriages and civil condition of the population of England and Wales, 113
Mausolius, king of Caria, identification of the tomb of, 15
Maunday twopenny piece, 263
Mediæval Signaculum of Saints Edwyn and Ecgwyn, Supplemental and Correctional Note, 253
——— signaculum, notice of, 165
——— objects found on the Cheshire shore, 1868, 213
——— seal, occurrence of, 203
Mortality in England and Wales, 114

N

Notice of a Mediæval Signaculum of the Anglo-Saxon Saints, Edwyn and Ecgwyn, 165
Notices of Roman-British Culinary Vessels discovered in North Wales, 19

O

Occupations of the people of England and Wales in 1861, 56
Observations on Population Statistics, Part I, 55; Part II, 93
On Some Oriental Geographers, 181
On the Gains and Losses in Historic Progress, 219
Oldfield, Edmund, F.S.A., quoted, 40

P

Parc-y-Meirch, Roman encampment at, 38
Petrified human eyes (so-called), theories concerning, 227
Playbill, 1783, 258
Population, increase of, 100; density of, 97
Pope, Rev. W., of Oxton, 261
Potter, Charles, 264
Primeval objects found on the Cheshire shore, 1868, 209
Proceedings, Session XXI, 1868-69, 257

R

Rathbone, Samuel, penny token of, 1666, 260
Report of the Census Commissioners (1861) quoted, 57
Religious houses in the Ribble District during the Norman period, 170
Report of Session XXI, 1868-69, 257, 258
Riot at Ulverston at the commencement of the 19th century, 51
Roman coin found at Parkgate, 199
——— remains, observations on those hitherto discovered in the Vale of Clwyd, 36
Roman-British culinary vessels found in Denbighshire, 20
Romano-British objects found on the Cheshire shore, 1868, 210
Roman culinary vessels, 259
——— bronze vessels discovered on Castle Howard estate, Yorkshire, 40
——— objects discovered at Ribchester, 34
——— encampment at Parc-y-Meirch, North Wales, 38

S

Saxon antiquities found on the Cheshire shore, 1868, 213
Seals used in monasteries, 178
Signacula of the Middle Ages, 167
Smith, H. Ecroyd, author of papers, 19, 165, 199; 259, 262, 264
Smith's, Piazzi, theory of pyramidal revelation, 15
Smith, C. Roach, 15
Soliman, voyage of, in the 9th century, 183
St. George's Hall, Liverpool, erection of, 233; description of, 245
Statistics of population, 55
St. Asaph, seal of the Consistory Court of, 202, 264
St. Margaret's seal, 14th century, 259
Stone hatchet found at Chat Moss, 259
Stoves, use of by the Romans, 42
Stone, age of, 8
Squier, George, Archæological investigation of, in America, 14

T

The so-called "Petrified Human Eyes," from the Graves of the Ancient Indians, Arica, Peru, 225
The Late Mr. Elmes and St. George's Hall, 233
The Last Popular Risings in the Lancashire Lake Country, 45
Thompson, Brown, 259
Tin, more valued in ancient than in modern times, 32
Tin-plating, observations on, 33-5
Town, definition of, 96
Trouvaille of English shillings, 263
Trades and professions, statistics of persons engaged in, in England (1861), 58; method of classifying, 63

V

Vandalism by the bishop of Quesaltenango, 11

W

Walthew, J. M., 259
Welton, Thomas A., author of papers, 55, 93; 259, 263
Wilderspool, excavations at, 199

Y

Youd F. M., 262

FINIS.

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TRANSACTIONS

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OF

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This Volume has been edited by the Assistant Secretary, under the direction of the Council. The Writers of Papers are solely responsible for the facts and opinions contained in their respective communications.

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CONTENTS.

[Papers marked thus * are Illustrated.]

	PAGE
Address to the Members of the Historic Society of Lancashire and Cheshire. By the Rev. A. Hume, D.C.L., LL.D., President	1
The Grammar School, Burnley. By T. T. Wilkinson, F.R.A.S.	19
Facts and Suggestions connected with Primary Education, with Illustrations from the Borough of Liverpool. By the Rev. A. Hume, D.C.L., LL.D., President	35
On the Political Economy of Great Britain. Part I, Public Indebtedness. By B. L. Benas, Esq.	55
On the Political Economy of Great Britain. Part II, The Poor Laws. By B. L. Benas, Esq.	77
*The Origin and History of the Warrington Blue Coat School. By John Bowes, Master of the Institution...	89
Biographical Sketch of William Everard, Architect and Surveyor, 1723-1792. By T. J. Kilpin, Esq.	127
The Early Inhabitants of Lancashire and the Neighbouring Counties, and Remains of their Mythology and Local Nomenclature. By Chas. Hardwick, Esq.	139
On Greek Coinage. By B. L. Benas, Esq.	163
A Littoral Survey of the Port of Liverpool, by Edward Eyes. With Additions and Emendations from the Original Note Books, by Joseph Boult, F.R.I.B.A. ...	171
On Current German Thalers. By S. Smith, Jun., Esq.	247
*Archæology in the Mersey District, 1869. By Henry Ecroyd Smith	267

List of Members	vii
Proceedings, Twenty-second Session	295
Report presented at the Annual Meeting	*ib.*
Excursion	306
Donations to the Library	307

LIST OF ILLUSTRATIONS.

Plate.		Page.
I.	The Warrington Blue Coat Hospital	102
II.	Drinking Cup in Delft Ware ..... to face	283
III.	Counterfeit Sterling, 14th Century; Half-penny Token of Samuell Rathbone, 1669; Seal of Latten; Half-penny Token of Peter Atherton, 1668..... ,,	287

LIST OF MEMBERS.

(Made up to March 18th, 1870.)

SESSION XXII, 1869-70.

The first List was dated 23rd November, 1848; all whose names appeared in it are therefore Original Members. Those who have been enrolled as Mayors or Sheriffs have their year of office attached.

The letter P denotes that the Members, in connexion with whose names it occurs, have read papers before the Society.

Those whose names are printed in SMALL CAPITALS are Members of the Council; and in *Italics* are Life Members.

Those marked thus * are Resident. The post town Liverpool is usually omitted.

A

23rd Nov., 1848. *Ainslie, Montague*, Grizedale hall, Hawkshead, Windermere.

11th Feb., 1869. *Amer, Stephen, Bridge street, Birkenhead.

4th Dec., 1862. *Anderson, John, 42, Bold street.

17th Dec., 1857. *Anderson, Thomas Darnley, West Dingle.

4th Dec., 1856. Ansdell, John, St. Helens.

23rd Nov., 1848. Ansdell, Richard, A.R.A., Lytham house, St. Alban's road, Kensington, London, W.

15th Sep., 1854. Arrowsmith, P. R., The Ferns, Bolton.

2nd Dec., 1858. Artingstall, George, Warrington.

P. 4th Dec., 1862. Ashfield, Charles Joseph, 9, Regent street, Preston.

H. Sh. Cheshire, 1857. *Atkinson, William*, Ashton heyes, Chester.

B

2nd Nov., 1865. *BAILEY, F. J., M.R.C.S., 51, Grove street.

8th June, 1854. *Banning, John Johnson, 20, Castle street.

1st Mar., 1866. *Barrow, S., 323, Vauxhall road, and Seaforth.

7th Feb., 1861. *Bartlett, William, 22, North John street.

1st Dec., 1864. *Bath, John D., Garston.

6th Mar., 1862. *Bazley, Sir Thomas, Bart.*, M.P., Hayesleigh, Manchester, and Reform Club, London, S.W.

P. 6th Dec., 1849. Beamont, William, Warrington.
21st May, 1857. *Bean, Edwin, Revenue buildings.
23rd Nov., 1848. *Bell, Henry, Hamilton square, and Grosvenor road, Claughton, Birkenhead.
P. 1st Dec., 1864. *Benas, B. L., 5, South Castle street.
23rd Nov., 1848. *Bennett, William, Sir Thomas's buildings, and Heysham, near Lancaster.
7th Mar., 1850. Birch, Sir Thomas Bernard, Bart., The Hazles, Prescot.
23rd Nov., 1848. Birchall, Lieut.-Col. Thomas, Ribbleton hall, Preston.
4th Mar., 1852. Birley, Rev. John Shepherd, Moss Lea, Bolton-le-Moors.
P. 8th Jan., 1852. Birley, T. Langton, Carr hill, Kirkham.
23rd Nov., 1848. Blackburne, John Ireland, The Hall, Hale.
20th Sept., 1854. Blackmore, William, Carshalton, Surrey.
23rd Nov., 1848. *Blundell, Thomas Weld, Ince Blundell hall, Great Crosby.
1st May, 1856. Booth, John Billington, Overleigh house, Preston.
15th Dec., 1853. Bossi, Arthur, Paris.
3rd Jan., 1856. *Bouch, Thomas, 1, Oldhall street, and New Brighton.
P. 23rd Nov., 1848. *Boult, Joseph, F.R.I.B.A., Exchange buildings West, and Parkfield road, Aigburth road.
8th Dec., 1851. Bourne, Cornelius, Stalmine hall, Preston.
15th April, 1858. *Bower, Anthony, Vauxhall foundry, & Seaforth.
P. 6th Dec., 1855. Bowes, John, Blue Coat School, Warrington.
3rd Dec., 1868. Boyle, Henry, Ella House, Ambleside.
P. 12th Dec., 1867. Boyle, Frederick, F.R.G.S., Pennant's house, Bebington.
13th Nov., 1851. Brackstone, R. H., Lyncombe hill, Bath.
17th Dec., 1857. *Bradley, William Gibson, 52, Bold street.
Mayor L'pool, 1848-9. *Bramley-Moore, John, Hon. Mem. Archæol. Association, Aigburth.
30th Dec., 1854. Brent, Francis, Custom house, Plymouth.
P. 7th May, 1863. *Bright, E. B., 2, Exchange buildings, and Waterloo.
P. 9th Mar., 1854. *Bright, Henry Arthur, A.M., Fairfield, and 1, North John street.
4th Feb., 1864. Bright, Sir Charles Tilston, M.P., C.E., F.R.S., 12, Hyde park gardens, London.
3rd May, 1849. Brooke, Henry, Forest hill, Northwich.

6th Mar., 1851. *Brooke, Sir Richard, Bart.*, Norton priory, Runcorn.

20th Feb., 1868. Burgess, Rev. W. R., B.A., Latchford, Warrington.

6th Feb., 1868. Brooks, William Cunliffe, M.P., Barlow hall, near Manchester.

1st Nov., 1866. Brooks, William Murray, St. James's Schools, Accrington.

17th Sept., 1854. Burnell, Rev. Samuel, A.M., Winwick, Warrington.

P. 15th Dec., 1853. *Buxton, David, F.R.S.L., Principal of the Liverpool Deaf and Dumb Institution, Oxford street, Hon. Secretary.

C

23rd Nov., 1848. *Caine, Nathaniel, 12, Dutton street.

3rd Dec., 1857. *Calder, Rev. William, A.M., Fairfield.

1st Dec., 1859. Callender, W. Romaine, jun., F.S.A., Ashburne house, Rusholme, Manchester.

P. 6th Dec., 1855. Calvert, F. Crace, Ph. Dr., F.R.S., F.C.S., M.R.A.Turin, Chemical Works, Gibson st., Bradford, near Manchester.

23rd Nov., 1848. *Campbell, Rev. Augustus, A.M., the Vicarage, Childwall.

18th Dec., 1856. *Campbell, Wm., Captain & Adjutant R.L.M.A., Artillery barracks, Rupert lane.

3rd Dec., 1868. *Cape, John, 22, North street.

3rd Dec., 1857. *Chadburn, Charles Henry, 71, Lord street, and Egremont, Birkenhead.

H. Sh. Chesh., 1855-6. *Chapman, John*, Hill End, Mottram-in-Longdendale.

14th April, 1859. *Clement, Leonard*, Nelson-in-Marsden, near Burnley.

24th May, 1855. *Comber, Thomas*, Hargreaves buildings, Chapel street.

4th Mar., 1858. Crawford and Balcarres, Right Hon. the Earl of, Haigh hall, Wigan.

6th Dec., 1849. *Crosfield, Henry, 4, Temple place and Aigburth.

23rd Nov., 1848. Crosse, Thomas Bright, Shawe hill, Chorley.

2nd May, 1850. Crossley, James, F.S.A., President of the Chetham Society, 6, Booth street, Piccadilly, Manchester.

P. 23rd Nov., 1848. *Cust, General the Hon. Sir Edward, K.C.H., D.C.L., Leasowe Castle, Cheshire.

D

23rd Sept., 1854. *Davies, Comenius, 8, Kinglake street, and Borough Engineer's Office, Dale street.

23rd Nov., 1848. **Dawson, Henry*, 30, Redcross street, and 14, St. James's road.

P. 2nd May, 1850. *Dawson, Thomas, M.R.C.S. Eng., 26, Rodney street.

6th Mar., 1862. *Derby, Right Hon. the Earl of*, Knowsley hall, Lancashire, and 23, Saint James's square, London, S.W.

23rd April, 1857. *Devonshire, His Grace the Duke of*, K.G., D.C.L., F.R.S., Chatsworth, Derbyshire, and Devonshire house, London.

E

9th Dec., 1852. *Eckersley, Thomas*, Wigan.

6th Mar., 1862. *Edwards, Edward, Adelaide buildings, Chapel street, and Holly lodge, Fairfield.

6th Mar., 1862. Egerton, Hon. Algernon, M.P., Worsley Old hall, Manchester.

7th Jan., 1851. *Egerton, Hon. Wilbraham*, M.P., Rosthern hall, Knutsford.

6th Mar. 1862. *Egerton of Tatton, Rt. Hon. the Lord*, Tatton park, Knutsford.

P. 23rd Nov., 1848. *Egerton, Sir Philip de Malpas Grey*, Bart., M.P., F.R.S., F.G.S., Oulton park, Tarporley.

9th Jan., 1868. *Ellerbeck, J. T., Bold street.

12th Dec., 1867. *Elsby, Miles Pilling, Bebington.

23rd Nov., 1848. *Evans, Edward, 56, Hanover street.

P. 4th Nov., 1858. *Evans, Edward Francis, Revenue buildings.

F

3rd Dec., 1857. Fairbairn, Sir William, Bart., D.C.L., F.R.S., Manchester.

ffarington, Miss, Worden hall, Preston.

23rd Nov., 1848. *Finlay, William, Liverpool College, and Shaw street.

P. 15th April, 1858. *Forrest, J. A., 58, Lime street, and 5, Charlesville, Claughton, Birkenhead.

7th May, 1857. *Frackleton, Rev. S. S.*, A.M., Ballynahinch, Ireland.

15th Dec., 1853. *Franks, Augustus Woollaston*, A.M., F.S.A., British Museum, London.

7th Jan., 1858. Frost, Meadows, 25, The Albany, Oldhall street, and St. John's house, Chester.

G

14th Dec., 1848. *Gardner, Richard Cardwell, Colonial buildings, 34, Dale street, and Croxteth road.

3rd May, 1849. Garnett, Wm. J., Quernmore park, Lancaster.

23rd Nov., 1848. *Gaskell, John Rooth, Exchange court, Exchange street East.

11th April, 1867. *_Genn John Hawke_, 18, Mersey road, Rock Ferry.

18th Dec., 1856. *Gerard, Henry, 10, Rumford place.

P. 1st May, 1862. *Gibson, J. H., 144, Vauxhall road.

P. 5th Nov., 1863. *Gibson, Thomas, 51, Oxford street.

6th Mar., 1862. _Gladstone, Right Hon. W. E._, M.P., 11, Carlton House terrace, London, S. W.

4th Dec., 1862. *Goodier Thomas, 110, St. Domingo vale, and 6, Lord street.

19th Dec., 1852. *Graves, Samuel Robert, M.P., 13, Redcross street, and The Grange, Wavertree.

6th Feb., 1851. Gray, Lieut.-Colonel, M.P., Darcy Lever hall, Bolton.

4th Dec., 1862. Green, John Henry, Buenos Ayres.

16th Sept., 1854. Greene, John Stock Turner, Adlington hall, Chorley.

31st Aug., 1854. Grenside, Rev. William Bent, A.M., Melling Vicarage, Lancaster.

19th Mar., 1857. *Grimmer, W. Henry, Prince's buildings, 30, North John street.

H

1st Dec., 1864. *Haigh, Thomas, 47, Boundary lane.

21st May, 1857. *Hall, Charlton R., 19, Dale street, and Liscard castle, Birkenhead.

10th Dec., 1857. *Hancock, Thomas S., Sweeting street, and Birkenhead.

P. 6th Mar., 1856. Hardwick, Chas., 148, Embden street, Hulme, Manchester.

12th Jan., 1854. _Harrison, Wm._, F.S.A., F.G.S., F.R.S. North. Antiq., &c., Samlesbury hall, Preston; Conservative Club, St. James's, S.W.; and R.T.Y. Club, Albemarle street, W.

9th Feb., 1864. _Harrowby, Rt. Hon. the Earl of_, D.C.L., F.R.S., Sandon hall, Staffordshire, and 39, Grosvenor square, London.

23rd April, 1857. _Hartington, Most Hon. the Marquess of_, M.P., Chatsworth, Derbyshire, and Devonshire house, London.

P 11th Oct., 1854. *Hartnup, J., F.R.A.S., Observatory, Bidston, Birkenhead.

8th Dec., 1864. Heald, Thomas, Greenfield, Billinge, Wigan.

27th Sept., 1854. *Healey, Samuel R., 7, Dale street, and Westbank, Woolton.

24th Oct., 1854. Heginbottom, George, Birkdale park, Southport.

2nd April, 1868. *Hewitt, James, 1, Dover street.

23rd Nov., 1848. *Heywood, James*, F.R.S., F.S.A., F.G.S., 26, Kensington Palace Gardens, London, W.

23rd Sept., 1854. *Hindmarsh, Fred.*, F.G.S., F.R.G.S., 4, New Inn, Strand, London, W.C.

12th Jan., 1860. *Holden, Adam, 48, Church street.

18th Jan., 1866. *Holden, R., 57, Dale street.

18th Dec., 1856. *Holden, Thomas*, Springfield, Bolton.

24th Sept, 1854. *Holt, William D., 23, Edge lane.

23rd Nov., 1848. *Horsfall, Thomas Berry, Bellamour hall, Rugeley, Staffordshire.

6th Dec., 1860. *Houghton, James, 84, Rodney street.

14th April, 1853. **Houghton, Richard H.*, Sandheys, Waterloo.

4th Dec., 1856. *Howell, Edward, 26, Church street.

Mayor Lan., 1849-50. Howitt, Thomas, Lancaster.

P. 8th Nov., 1849. *Howson, Very Rev. John Saul, D.D.*, The Deanery, Chester.

27th Sept., 1854. *Hubback, Joseph, 1, Brunswick street, and Rodney street.

P. 10th Dec., 1857. *Hughes, John R., 17, Tower chambers.

6th April, 1854. Hughes, Thomas, 2, Groves terrace, Chester.

8th Feb., 1862. Hulton, William Adams, Hurst grange, Preston.

Mayor Ch., 1851-52. Humberston, Philip Stapleton, Chester.

P. 23rd Nov., 1848. **Hume, Rev. Abraham*, D.C.L., LL.D., F.S.A., F.R.S. North. Antiq. Copenhagen, Corr. Mem. S.A. Scot., Hon. Mem. of the Society of Antiquaries, Newcastle-upon-Tyne, 6, Rupert lane, PRESIDENT.

21st May, 1857. *Hume, Hamilton*, F.R.G.S., Cooma, Yass, New South Wales.

10th Feb., 1870. Hyde, John, Hesketh street, Southport.

J

1st April, 1852. *JACOB, JOHN GIBBORN, 56, Church street, TREASURER.

5th Dec., 1861. Jackson, William, Fleatham house, St. Bees.

23rd Nov., 1848. Jacson, Charles R., Barton hall, Preston.

P. 2nd May, 1861. *JEFFERY, F. J., 45, Church Street, and Woolton hall.

21st May, 1857. *Jeffery, James Reddecliffe, 45, Church street, and Woolton hall.

23rd Nov., 1848. *Johnson, John H., 7, Church-st., and Southport.

23rd Sept., 1854. Jones, Edward, The Larches, Handsworth.

3rd May, 1849. *Jones, Morris Charles, 20, Abercromby square.

2nd Dec., 1858. *Jones, Robert, 7, Batchelor street.

6th Dec., 1849. *Jones, Roger L., Sunnyside, 1, Belvidere road, Prince's park.

15th Sept., 1854. Jones, Thomas, B.A., F.S.A., Chetham Library, Manchester.

11th Dec., 1856. Jones, W. Hope, Hooton, Chester.

9th Jan., 1868. Jones, Rev. Charles, Rock Ferry.

K

P. 3rd May, 1849. Kendrick, James, M.D., Warrington.

P. 5th March, 1868. *Kilpin, J. T., Trafford chambers, 58, South John street, and 6, Grove street.

4th Dec., 1862. *King, Lieut-Col. Vincent Ashfield, 18, Tower chambers, and Point of Ayr, Oxton.

5th Nov., 1863. *King, John Thomson, Clayton Square.

L

6th March, 1862. *Laird John, M.P., Hamilton square, Birkenhead.

23rd Nov., 1848. Langton William, —— Bank, Manchester.

Legh, Miss, The Limes, Hale.

23rd Nov., 1848. Legh, G. Cornwall, M.P., High Legh, Knutsford.

1st Dec., 1859. *Legh, W. J.*, M.P., Lyme park, Disley, Stockport.

10th Dec., 1857. *Leigh, Major Egerton*, The West Hall, High Leigh, Knutsford.

1st Nov., 1866. *Lilley, John H., H.M. Customs, Revenue buildings.

M

6th March, 1862. McCorquodale, Lieut.-Colonel G., Newton-le-Willows.

15th April, 1858. *McInnes, J., 23, Lightbody street.

27th Sept., 1854. *Macfie, Robert Andrew, M.P., 30, Moorfields, and Ashfield hall, Neston.

23rd Nov., 1848. M'QUIE, PETER ROBINSON, 9, Brunswick street, and Thornton lodge, Merton road, Bootle, VICE-PRESIDENT.

5th May, 1853. **Macrae, John Wrigley*, 22, Hackin's hey, and Seaforth house, Seaforth.

23rd Nov., 1848. *Marsden, George, Old Churchyard, and Vernon priory, Edge hill.

1st Dec., 1859. Marsh, John, Rann lea, Rainhill.

P. 5th June, 1851. MARSH JOHN FITCHETT, Fairfield house, Warrington.

1st Dec., 1864. Marson, James, Warrington.

1st Dec., 1864. *Mathews, John, Highfield, Rock Ferry, Birkenhead.

6th March 1862. *MATHISON, WILLIAM, 11, Dale street.

P. 23rd Nov., 1848. *MAYER, JOSEPH, F.S.A., M.R. Asiat. S., F.E.S., F.R.S. North. Ant. Copenhagen, Associé étranger de la Société Impériale des Antiquaries de France, Hon. Mem. SS. Anti., Normandie, l'Oûest, la Morinie, Société d'Emulation d'Abbeville, &c., 68, Lord street, VICE-PRESIDENT.

7th Dec., 1865. *Miller, Henry, Toxteth dock.

2nd Jan., 1862. *Milligan, James, jun., Eldwood End, Grassendale, Aigburth.

21st Feb., 1861. Mills, John, Middle School, Warrington.

20th May, 1860. Mills, Robert, F.S.A., F.G.S., 27, Promenade, Rochdale.

P. 21st Dec., 1854. *Milner, William, Bentley road, and Phœnix Safe Works, Windsor.

3rd Dec., 1857. Moore, Rev. Richard R., A.M., St. Anne's, Eccleston, St. Helens.

P. 8th Nov., 1849. Moore, Rev. Thomas, A.M., Midleton College, County of Cork.

P. 23rd Nov., 1848. *Moss, Rev. John James, LL.D., East Lydford Rectory, Somerset.

3rd Dec., 1863. Moubert, Adolphus, Garswood-Ashton, Warrington.

3rd Dec., 1857. Moult, William, 21, Leigh street, and Knowsley.

11th Dec., 1856. Myres, John James, Bank parade, Preston.

N

H. S. Ches., 1857. *Naylor, Richard*, Hooton hall, Chester.

P. 1st Nov., 1866. Newbigging, Thomas, Bacup.

19th March, 1863. Newsham, Richard, Preston.

23rd Nov., 1848. Nicholson, James, F.S.A., Thelwall hall, Warrington.

29th Sept., 1854. *Nottingham, John, M.D., F.R.A.S., F.R.S. Northern Antiquaries, Copenhagen, 20, Roscommon street.

O

P.	6th Dec., 1849.	Ormerod, George, D.C.L., F.R.S., F.S.A., F.G.S., Sedbury park, Chepstow.
	3rd Jan., 1850.	*Overend, James, 55, Hope street.
	3rd Dec., 1857.	Oxley, Frederick, 6, Hungerford rd., London, N.

P

	23rd Nov., 1858.	*Paris, Thomas Jeremiah, 68, Lord street.
	18th Dec., 1856.	Parker, Robert Townley, Cuerdon hall, Preston.
	7th Mar., 1850.	*Patten, Right Hon. John Wilson*, M.P., Bank hall, Warrington.
	6th Dec., 1849.	Pearce, George Massie, Hackin's hey, and Ormskirk.
	11th Dec., 1856.	*Pedder, Henry Newsham*, 9, Queen's gate, Prince Albert road, South Kensington, London, S.
	1st Dec., 1864.	Perry, Rev. S. G. F., M.A., Incumbent of Tottington, near Bury.
	21st Mar., 1860.	**Petty, Thomas Shaw.*
	12th Dec., 1867.	Pickering, James, Fisher house, Orrell, near Wigan.
P.	6th Jan., 1849.	*Picton, James Allanson, F.S.A., Queen bldgs., Dale street, and Sandyknowe, Wavertree.
	3rd May, 1849.	Pierpoint, Benjamin, St. Austin's, Warrington.
	23rd Nov., 1848.	Pilkington, James, Park pl. house, Blackburn.
	10th Feb., 1853.	*Platt, Robert*, Stalybridge.
	1st Dec., 1864.	*Porter, John, Clayton square.
	12th Mar., 1857.	*Preston, Geo. Theo. Robert, 13, Vernon street, Dale st., and Belmont house, Belmont rd.
	6th Dec., 1849.	*Preston, William, 13, Vernon street, and Ellel Grange, near Lancaster.
	14th Jan., 1864.	*Priest, Thomas E., Clarendon rooms, South John street.

R

	15th Mar., 1849.	Rawlinson, Robert, C.B., C.E., F.G.S., Sanitary Commissioner, Local Government Act Office, 8, Richmond terrace, Whitehall; and Lancaster lodge, Boltons, West Brompton.
	13th Sept., 1854.	*Raynes, James Trevelyan, 37, Oldhall street, and Rock Park, Rock Ferry.
	29th Dec., 1854.	Rees, William, Old Trafford, Manchester.
	3rd Dec., 1863.	Rhodocanakis, Captain H.H. the Prince, Manchester.

20th Dec., 1855. Robin, Rev. P. R., A.M., Woodchurch, Birkenhead.

23rd Nov., 1848. *Robinson, Charles Backhouse.

1st Dec., 1864. *Robinson, John, 41, Lord street.

3rd Jan., 1850. *Ronald, Robert Wilson, 19, Dale street.

15th April, 1858. Rooke, Rev. W. J. E., M.A., Tunstal Vicarage, Kirby Lonsdale.

15th April, 1858. Rowlinson, W., Windermere.

25th Sept., 1854. Rylands, Peter, M.P., Bewsey house, Warrington.

P. 13th Dec., 1854. RYLANDS, THOMAS GLAZEBROOK, F.L.S., F.G.S., Warrington, VICE-PRESIDENT.

S

6th Dec., 1855. *Sandbach, W. R., Bank buildings, Cook street, and The Cottage, Aigburth.

P. 7th Sept., 1851. Sansom, Thomas, F.B.S.E., Custom House, Newcastle-on-Tyne.

8th Jan., 1852. Sharp, John, The Hermitage, Lancaster.

23rd Nov., 1848. Sharpe, Edmund, A.M., Cwm Alyn, Llanrwst, North Wales.

2nd June, 1853. *Sharpe, William*, 102, Piccadilly, London.

23rd Nov., 1848. *Simpson, Rev. Samuel*, A.M., The Greaves, near Lancaster.

P. 16th April, 1863. *SMITH, HENRY ECROYD, Aldboro' house, Egremont, Birkenhead.

2nd May, 1850. **Smith, James*, Barkeley house, Seaforth.

16th Sept., 1864. Smith, John, Langley, near Macclesfield.

20th Feb., 1868. Smith, Samuel, jun., 8, Croxteth road, Prince's park.

12th Mar., 1863. *Squarey, Andrew Tucker, Gorsey Hey, Higher Bebington, and Dock Office.

2nd Nov., 1854. Stainer, William, Old Trafford, Manchester.

3rd Jan., 1856. *Staniforth, Rev. Thomas*, M.A., Storrs, Windermere.

5th Feb., 1863. Steele, Alexander, Ph.Dr., Bay View house, The Crescent, Douglas, Isle of Man.

13th Dec., 1855. *Steiner, F.*, Hyndburn, Accrington.

4th Mar., 1852. *Sykes, James, 115, Dale street, 78, Rodney street, and Breck house, Poulton-le-fylde.

T

18th Nov., 1869. *Thomas, George, Lord street.

18th Feb., 1858. *Thompson, Henry, 153, Upper Parliament st., and 11, North John street.

13th Sept., 1854. *Thornley, Samuel, Deane road, Fairfield.

17th Jan., 1867. *Thorp, Henry*, Whalley Range, Manchester.

P. 8th Dec., 1851. *Tinne, John A., F.R.G.S., Briarley, Aigburth.

8th Jan., 1852. *Torr, John, 15, Exchange buildings West, and Eastham.

H.S. Lanc., 1857. Towneley, Charles, Towneley, Burnley.

P. 2nd April, 1857. *Towson, John Thomas, F.R.G.S., 47, Upper Parliament street, and Sailors' Home.

14th April, 1863. *Turner, Charles, M.P., 4, Lancelot's hey, and Dingle head.

27th Sept., 1854. *Turner, John Hayward, 23, Abercromby square.

6th Dec., 1849. Turner, Edward, High street, Newcastle, Staffordshire.

U

8th Mar., 1854. Underwood, Rev. Charles W., A.M., Histon Vicarage, Cambridge.

V

23rd Nov., 1848. **Varty, Thomas*, Stag-stones, Penrith.

16th Dec., 1869. Vaudrey, Benjamin Llewellyn, Tushingham hall, Whitchurch.

14th April, 1853. *Vose, James, M.D., 5, Gambier terrace, Hope street.

W

Myr. C. 1838-39, 48-49. *Walker, Sir Edward Samuel*, Berry hill, Mansfield, Notts.

11th Dec., 1856. *Walmsley, Thomas*, Preston.

Dec. 3rd, 1868. *Walthew, J. M., 1, Tower chambers, and 30, Percy street.

12th Dec., 1867. *Walmsley, Gilbert G., Lord street.

6th Mar., 1851. Warburton, Rowland Eyles Egerton, Arley hall, Cheshire.

21st May, 1857. Ward, John Angus, Hooton Lodge, Chester.

3rd May, 1864. *Waterhouse, John Dockray, 1, Oldhall street.

P. 5th Dec., 1861. *Waterhouse, Nicholas, Rake lane.

17th Dec., 1857. Watts, Sir James, Manchester.

2nd May, 1850. *Way, Albert*, A.M., F.S.A., Wonham manor, Reigate, Surrey.

1st Feb., 1849. *Webster, George, 6, York buildings, Dale street, and Mossley hill, Aigburth.

P. 3rd Jan., 1856. *Welton, Thomas A.*, F.S.S., 91, Mortimer road, De Beauvoir square, London, N.

13th Mar., 1862. Westminster, Most Noble the Marquess of, 33, Upper Grosvenor street, London, and Eaton hall, Chester.

2nd June, 1853. *Whitley, George, 5, Clayton square, and Bromborough.

9th Oct., 1854. Whitley, Rev. John, A.M., Newton rectory, Newton-le-Willows.

6th June, 1850. Whitley, Rev. William, B.A., Catsclough, Winsford, Cheshire.

P. 30th Nov., 1854. Wilkinson, Thomas Turner, F.R.A.S., Corr. Mem. Lit. and Phil. Soc. Manch., Burnley.

14th Feb., 1861. Wilson, J. M., Hardshaw street, St. Helens.

13th Nov., 1866. *Winder, Thomas, Coniston House, Walton.

23rd Nov., 1848. Wood, Isaac Moreton, Newton, near Middlewich.

7th Dec., 1865. *Wood, R. H.*, F.S.A., F.R.G.S., Mem. Corr. Soc. Antiq. de Normandie, Crumpsall, Manchester.

7th May, 1855. **Woodhouse, John George*, Bronte House, Everton Valley.

14th May, 1868. *Wordley, W. G., 15, Sweeting street.

HONORARY MEMBERS.

6th Feb., 1851. Akerman, John Yonge, Hon. M.R.S.L.; F.S.A. Newcastle; F.R.S. of Northern Antiquities; Corr. Mem. SS. Antiq. Scot., France, Russia, Switzerland, Rome; Hon. Mem. Roy. Acad., Stockholm; London.

27th Sept., 1854. Babington, Charles Cardale, A.M., F.R.S., F.S.A., F.L.S., Professor of Botany, Cambridge.

6th Feb., 1851. Blaauw, William Henry, A.M., F.S.A., Beechland, Uckfield.

1st Nov., 1860. Brown, James, New York, U.S.A.

6th Feb., 1851. Charlton, Edward, M.D., F.S.A. Newc., 7, Eldon square, Newcastle-upon-Tyne.

P. 1st Feb., 1855. Clarke, Joseph, F.S.A., Saffron Walden, Essex.

19th May, 1859. Cochet, M. L'Abbé, Inspector of Antiquities and Monuments in Normandy, Dieppe.

27th Sept., 1854. Gray, John Edward, Ph.D., F.R.S., F.L.S., &c., British Museum, London.

P. 27th Sept., 1854. Latham, R. Gordon, M.D., F.R.S., 99, Disraeli road, Putney, London.

9th Dec., 1852. MacAdam, Robert, 18, College square East, Belfast.

27th Sept., 1854. Murchison, Sir Roderick Impey, G.C. St. S., A.M., D.C.L., F.R.S., V.P.L.S., F.G.S., P.R. Geogr. S., Hon. M.R.I.A., Director-General of the Geological Survey of Great Britain and Ireland; Trust. Brit. Mus.; Hon. Mem. Acadd. St. Petersburgh, Berlin, Copenhagen; Corr. Mem. Inst. France, &c., 16, Belgrave square, London.

27th Sept., 1854. Owen, Richard, M.D., LL.D., F.R.S., F.L.S., F.G.S., British Museum, London.

P. 7th May, 1851. Pidgeon, Henry Clarke, 10, St. Leonard's terrace, Maida hill West, London.

27th Sept., 1854. Phillips, John, M.A., LL.D., F.R.S., F.G.S., Professor of Geology, and Keeper of the University Museum, Oxford; Hon. Mem. Imp. Acad., Moscow; Société Vaudoise, &c., Oxford.

27th Sept., 1854. Sabine, General Sir Edward, R.A., D.C.L., LL.D., Pres. R.S., F.R.A.S., 13, Ashley place, London, S.W., and Woolwich.

27th Sept., 1854. Sedgwick, Rev. Adam, A.M., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Woodwardian Professor, Trinity College, Cambridge.

P. 6th Feb., 1851. Smith, Charles Roach, F.S.A., Member of the Roy. Soc. North. Antiq. Copenhagen, Hon. Mem. SS. Antiq., France, Normandy, Scotland, Spain, Newcastle, the Morinie, Abbeville, Picardy, Wiesbaden, Luxemburg, Treves, Touraine, &c., Temple place, Strood, Kent.

6th Feb., 1851. Willis, Rev. Robert, A.M., F.R.S., Jacksonian Professor, Cambridge, and 23, York terrace, Regent's park, London.

P. 27th Sept., 1854. Wright, Thomas, A.M., F.S.A., Hon. M.R.S.L., Member of the Institute of France; of the Roy. Soc. North. Antiqs. Copenhagen; Hon. Mem. of the Soc. of Antiquaries of France; Corresp. Mem. Soc. Antiq. Normandy; of Soc. Antiqs. Scotland, &c., 14, Sydney street, Brompton, London.

P. 20th Jan., 1870. Walcott, Rev. Mackenzie E. C., M.A., B.D., M.R.S.L., F.S.A., &c., Precentor and Prebendary of Chichester, 58, Belgrave road, London, S.W.

Presidents since commencement.

1. Right Hon. Francis, 1st Earl of Ellesmere, Lord-Lieut. of Lancashire - 1848.
2. Right Hon. Charles William, 3rd Earl of Sefton, Lord-Lieut. of Lanc. - 1854.
3. General The Hon. Sir Edward Cust, K.C.H., D.C.L. - - - - 1855.
4. Right Hon. William Ewart Gladstone, M.P. - - - - - - 1863.
5. Joseph Mayer. F.S.A., &c. - - - - - - - - - - 1866.
6. Rev. A. Hume, D.C.L., LL.D., &c. - - - - - - - - - 1869.

Secretaries since commencement.

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1851. Rev. A. Hume, LL.D., &c., and Rev. Thomas Moore, M.A.

1854. Rev. A. Hume, LL.D., &c.

Assistant Secretaries.

1855. Rev. A. Hume, LL.D., &c. - Thomas G. Wedgwood, Esq.

1856. Rev. A. Hume, LL.D., &c. - W. W. Rundell, Esq.

1857. Rev. A. Hume, LL.D., &c. - J. H. Genn, Esq.

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1867. Nicholas Waterhouse, Esq. - A. C. Gibson, F.S.A.

1869. Nicholas Waterhouse, Esq. - H. Ecroyd Smith, Esq.

TRANSACTIONS.

ADDRESS
TO THE MEMBERS OF THE HISTORIC SOCIETY OF LANCASHIRE AND CHESHIRE.

By the Rev. A. Hume, D.C.L., LL.D., &c., President.

(Read 4th November, 1869.)

GENTLEMEN,

On taking the Chair as President of the Society, at the commencement of its twenty-second session, permit me in the first instance to tender my thanks to the Members, for their kindness and confidence in placing me here. I can assure you that it will be my pride and my pleasure, as heretofore, to contribute by every means in my power, to the honour and prosperity of the Society.

But, on glancing at the past, I do not think that I can promise much, perhaps anything, that is new. For example, I was one of the three Founders of the Society;—was its Honorary Secretary for sixteen years;—edited the first seven of its volumes;—have contributed about thirty-five papers, large and small, to its Transactions;—and have never ceased to be a member of the Council since its inauguration. I assume that these are the services, both in fact and in manner, of which you have so significantly expressed your approval;—and such being the case, it follows that by an honest and earnest persistence in the same course, I shall be most likely both to benefit the Society and to secure your approval.

Our Society differs from every other in this town in the following respects. It is the only one of public foundation, having been established at a Town's meeting, the Mayor in the Chair ;—the only one which makes investigation of the District a prominent part of its Proceedings ;—the only one which distinguishes between Resident and Non-resident members ;—which by its Laws is bound to publish annually an account of its Transactions ;—which has an illustrative Collection of its own ;—and which for thirteen years was worked in Sections.

I think it right thus to recal you to first principles which time has tested ; and my own experience is that just in proportion as they have been adhered to has the Society prospered,—while just in proportion as they have been departed from has it remained stationary or declined. At present, I will draw your attention specially to only two of them.

1. The production of an Annual Volume, of greater or less size according to circumstances, has been attended with the happiest results. Numerous other Societies have, within the last twenty years, imitated our example or approximated to it, giving us the credit due for the spirit with which we set out ; and one or more, of old standing, have changed their cumbrous quartos into octavos like our own.

2. For various reasons, the plan of working in Sections was adopted, when the Society enlarged its objects and operations in 1854 ;—one prominent idea being that we should cover the whole area of inquiry and not a part merely ; and also that we should frequently seek for papers from those most competent to prepare them, instead of receiving from meeting to meeting such as came voluntarily or accidentally,—with less assurance of qualification in the writers or of care in the preparation. There were those who thought that we aimed at too much, and who were therefore desirous to

remove all attempt at systematising the business;—but I can assure them that in those Sessions when the Sectional Committees did their work faithfully, there was no appreciable difficulty felt in carrying out the arrangements with perfect success. The result of this erroneous opinion was an attempt to "level down," if I may be allowed to use a common expression, our high principles to our loose practice; instead of "levelling up" our loose practice to our high principles. Already, I am glad to say, we have begun to effect a remedy. The Council for the present Session has been divided into the three Sections as before; and I have no doubt that before the Session is far advanced, the importance of the arrangement will be apparent to all.

Let me say a few words on the three subjects respectively, which constitute our division of labour; viz., Archæology, Literature, and Science.

I.—Natural Science, or Natural Philosophy, in a wide sense, treats of the Laws of Nature; that is to say of the invariable facts connected with matter, organised and inorganised, established by the Creator. There is also the philosophy of mind and of morals, but to that we do not refer at present. The term Art, on the other hand, is associated with the operations of man upon these materials, and in accordance with these laws. In the one case, we study the works of God directly or immediately; and with some minute exceptions, the materials rise to us ever fresh and ever new. In the other case, we study His works indirectly or mediately: that is to say as they are executed by Man, whom He has gifted with the necessary intelligence and skill.

When we speak of Archæology, therefore, we mean the study of ancient objects of human production, as illustrative of the history of our species; whether habitations, personal ornaments, implements of war or industry, or any thing else.

In a totally different sense, and without regard to the distinction just made, the Geologist is spoken of as really the most profound Archæologist; because he treats of periods many centuries anterior to the existence of man. But a more common expression, a few years ago, was that Archæology "pieces on" to Geology; for when the Geologist has shewn the various changes which have occurred in causing or modifying the various strata in the outer covering of the earth, the Archæologist comes in to write a more modern chapter,—still however consisting of many important sections,—shewing what man has done on the upper surface.

It has been proved however, that even this statement is only true with important modifications. Numerous works of man, have been found below the Drift in several places of France, and also in our own country: so that Archæology overlaps Geology, and one chapter of it at least can be read before we arrive at the most recent class of changes in the earth's surface. Hence, so rapidly do new truths succeed each other in our days, that long since the formation of our Society, Archæology has obtained a new position among the subjects of human knowledge, and has had its claims allowed to a place among the sisterhood of Sciences. Men of the stamp of Captain Grose and Mr. Oldbuck of Monkbarns have become antiquities themselves; and collections are valued not for the mere rarity of the objects which they contain but for their use in illustration, or for enabling us to give new and improved versions of History. In 1849, when I laid before this Society the researches of M. de Perthes of Abbeville,—whose writings were then received like the prophecies of Cassandra,—I little thought that a few years later they would command general belief, and attract universal attention. Men of great eminence, some of them the Fellows of the Royal and Geological Societies of London, have verified his facts and gladly accepted his discoveries; so that

human knowledge has been pushed forward in a new direction, and we have gained not only by what has been already secured but by what has been still further suggested.

Farther, as Man existed in every country before books, it is evident that the Historic records of any nation belong to an advanced stage of its existence. But what was the condition of the earlier populations, of the families who lived and died almost unknown? What was the fate of the hunters and fishers who from the teeming supplies of land and sea procured the small portion which they required; of the men who were satisfied with a natural cave for a home, or with a "bee-hive hut," or fled for shelter to *crannogues* and lake-habitations? There were heroes, and many of them, who had no bards to chaunt their praises;—predecessors of Achilles who were not so fortunate as to be followed by a Homer; and tribes innumerable who flourished before Cæsar had designed his Commentaries. The inquiry respecting these early peoples is deeply interesting and highly suggestive; and though it would appear at first that darkness impenetrable hangs around the whole subject, there has sprung up in connexion with it, one of the most interesting societies of modern times. This is the Congress of Prehistoric Archæology. It was cradled at Spezzia, in 1865; it held its first annual meeting at Neuchâtel in 1866; its second at Paris in 1867; and its third at Norwich in 1868. This year, its meeting was held at Copenhagen, a locality which affords an unusually large number of objects suitable for thought and inquiry; and I understand that in 1870 it is to meet at Basle. By one of its regulations, it does not meet during any two successive years in the same country of Europe.

My acquaintance with this Society was made at Norwich, where its meeting was held during the same week with that of the British Association; and though it was the latter body that I went to visit, I hope I may be excused for saying that

I was much more deeply interested by the proceedings of the former. It is scarcely credible how much light may be thrown, indeed has been thrown, upon early populations who flourished long before letters were known in their respective countries; and in conjunction with Ethnology the most distant families of mankind have been shewn to be identical, *e.g.* the New Hollanders, the ancient Egyptians, and the natives of the plateau of central India.

II.—Mere Literature contains less for the inquirer, though in some departments it is very rich. It also has made rapid progress during recent years, for while the expression "Science "of Archæology" would have been laughed at half a century ago, and that of "Science of Language" would have been regarded as almost equally absurd, the investigations of modern times have acquired a degree of order and system, so that Philology has assumed a definite form, instead of consisting as formerly of a series of ingenious guesses.

Of our own Literature we find some of the highest and lowest illustrations in our periodical publications; but many of our old authors are being reprinted,—"wells of English "undefiled,"—and the large number of purchasers which these editions secure, proves that there is a growing taste for such things in the public mind.

Nor is our own humble literature, the speech of the common people, to be despised. It carries us back sometimes a century and sometimes several centuries towards the Anglo-Saxon and Mediæval English of former days, and enables us to trace the origin and relations of various sections of our population. Addison astonished some of his contemporaries by stooping (as it was thought) to write a criticism on *Chevy Chase;* and Percy published a book of ancient popular ballads called the *Reliques of Ancient English Poetry.* What a sympathetic chord in the human heart the latter touched may be inferred from the fact, that for upwards of

fifty years after the issue of those ballads their effect was traceable in English Poetry, and in the altered condition of public taste.

There are thousands who cannot appreciate such a work as *Jamieson's Scottish Dictionary*, and who question the propriety of familiarising the public mind with obsolete and obsolescent words, which have long been regarded as vulgar. But the man of letters looks upon facts of this kind from a totally different point of view. He welcomes every illustration of popular speech, whether it be a general glossary like that of Nares, Halliwell, or Wright, or merely the illustration of a local dialect extending over a shire, a hundred, or a parish. The glossaries of English local dialects probably amount to nearly a hundred in all; and three or four have recently been published by the Philological Society. But more curious still is the fact that a Devonshire Clergyman has recently edited a Glossary of local Hibernic words, viz., those found in the Baronies of Forth and Bargy in Wexford; where Strongbow's followers settled in the twelfth century, and "Chaucer English," greatly resembling the Devonshire dialect, was spoken till within the last seventy years.

It is interesting to see the uses to which popular literature can be and is daily applied. I need only notice in general terms the improved editions of some of our standard classic authors,—as Chaucer, Shakspeare, the elder dramatists generally, and Milton. Even our "authorised version" of the Scriptures receives some of its most interesting illustrations from the popular speech of the Elizabethan period; and I was greatly interested a short time ago, in finding some very appropriate illustrations of this kind in the notes appended to the collection of Bishop Sanderson's works, edited by the present Bishop of Chester.

Literature also embalms certain obscure facts; and through

centuries of blindness and ignorance preserves them for future illustration and investigation. It is thus that some of the statements of Herodotus, and records in the Old Testament have received curious and unexpected confirmation in modern times. And it was partly thus that the Rosetta Stone became an alphabet for extensive acquirements, and that the Moabite stone found near the Dead Sea is likely to be the key to other important information. Even in our own country, a knowledge of obscure characters, like the Runic and Ogham inscriptions, enables us to look into the events of past centuries, and to re-write our history with numerous improvements.

III.—Science exists in various departments. We may smile at the old divisions of nature—animal, vegetable, and mineral —or at what were called the four elements—fire, air, earth, and water; but every subject must have its infant stage, and we can still look with some respect even upon Astrology and Alchemy, the forerunners respectively of Astronomy and Chemistry.

In modern times, however, the departments of Science are so numerous that they remind one of the twigs or sprays of a tree, uniting in minor branches which again unite in major ones, yet all claiming affinity with the parent stem. And as also only a few of the secrets of Nature have yet been discovered, even the narrowest field presents boundless materials for investigation.

Some of these, like Astronomy, Botany, and Zoology, have direct reference to nature; while others, like Mechanics and Navigation, have a more marked connection with practice. Indeed almost every Science has its corresponding Art. This is quite what one would expect, that when Nature gives up her secrets to man, he should ask her to operate in a given direction for his pleasure or profit.

In short, Science is to Nature what Grammar is to Language.

It discovers the laws by which processes take place, and applies those laws, or takes advantage of them, for the benefit of mankind. A poet has said truly of the heavenly system, and of the laws of the Great Creator—

"Which but to guess, a Newton made immortal;"

and we are all guessing and exploring from time to time, sometimes inaccurately, but in general approximating to the truth. Experiment differs from observation in that it is active instead of passive. It asks a question, as it were, and receives an answer affirmative or negative as the case may be.

Our own locality furnishes materials for the investigation of all these three subjects. In *Archæology*, for example, we have pre-historic objects, runic and other sculptured stones,—canoes found in bogs and "blind lakes," cairns and barrows, British and Roman roads, castles and other public buildings, and numerous objects illustrative of the skill and manners of our predecessors on the soil. In local *Literature*, we have not merely county but parish histories, that of Whalley being particularly valuable; and we have numerous works illustrating popular traditions, superstitions, sayings, and folk-lore generally. The dialect of Lancashire and Cheshire is specially interesting; and several learned and curious papers have been written in illustration of our local geographical nomenclature. To these we may add popular ballads and ancient manuscripts. The results of *Science* are everywhere visible around us; for example practical mechanics in mining, chemistry in dyeing, and navigation and naval architecture in connexion with our principal ports. The history of the Cotton manufacture and of its influence upon this part of the country is of boundless interest, though extending over a comparatively narrow period; besides, there are public works of great interest, such as the numerous railways, some of which were constructed under unusual difficulties; the drainage of lakes,

such as Martin Mere, and the supply of water to towns. It is a somewhat singular but a very gratifying fact, that within the last few months two eminent practical engineers in our locality have been raised to the rank of baronets; the fact illustrating at the same time the position which our district holds, and the impartiality with which intellectual abilities are estimated, whether the possessor be a native or a nominal stranger.

The British Association for the Advancement of Science, founded in 1831, visits the great provincial towns of the kingdom in succession; and during the thirty-eight years and upwards of its existence it has visited twenty-six localities. Of these, nineteen are in England, four in Scotland, and three in Ireland. Its first visit to Liverpool took place in 1837; at which time Science was cultivated by a very few individuals, and these little known; Literature had claimed a hearing, but Archæology had probably not one representative. In the seventeen years which elapsed till the second visit of the Association in 1854, there were aspirations after higher things, and these had received at least promise of realization. Several societies had been founded for the cultivation of specific branches of knowledge, and more than one of these had begun to print their Proceedings or Transactions; the old system of Lectures twice a week had died out, a proof that men were able to read for themselves; an Observatory on a small scale had been established; and the Free Public Library and Museum, both at that time in the day of small things, had been opened about a year before.

A great impulse was given by this visit to intellectual pursuits; and though in this respect we are still far behind many towns of less importance in the kingdom, it is unquestionable that within the last fifteen years we have progressed more than during any previous period of

seventy or eighty. The Observatory has been enlarged, and removed from the smoke of the town to a home more suitable for it; the Free Public Library has become a great institution, and has found a permanent home in a building erected by a late townsman;—a School of Science is connected with it;—the Derby Museum has been laid out, and increased by other donations, less extensive but similar in character;—and the numerous and valuable literary, archæological and ethnological collections of our late President, Mr. Mayer, have been generously presented to the town, and have found their home in the new building. I need say nothing of the improvements in streets and in architecture, which are obvious to the ordinary wayfarer; and the public buildings which have been erected since 1854 will show that the rapidity of our progress does not apply to population merely.

While we hope to profit largely next year by another brief visit of even one week's duration; and while we engage in the profitable transaction of receiving their intellectual things for some of our material ones, there are several practical lessons which our town may learn at the same time. One is, that order and concentration are not out of place in intellectual things any more than they are in material ones. Several sections, apparently independent of each other, and to the thoughtless observer without any practical bond of union, pursue their inquiries in separate apartments, and under the authority of distinct sets of officers. Yet there is an undeniable, and in some instances a very distinct relationship, which the eye of the more intelligent observer can discern. The traveller on the narrowest line of investigation finds that his favourite pathway ends in broader and more defined lines of thought; he discovers in short that instead of standing on an island, he is only on a peninsula of a great continent. He sees that his own favourite section is

modified from time to time by a General Committee; that an abstract of his paper is inserted in a common volume; that this contains Reports on subjects allied to it and to many others; and that a Council in London superintends the general arrangements.

It is a pity that many are so slow to learn a lesson so obvious. I have heard it said that there are ten Learned Societies in Liverpool,—though if the term be not employed in a very loose sense, he would be a clever man who could name them,—and we shall suppose that the statement is approximately true. But what does it prove? Why that our local intellectual resources, which are very limited, are frittered away in efforts unworthy of ourselves and of the town. In some cases, originality of thought or investigation is quite out of the question;—and on the other hand, papers that would be creditable to their authors or to the community, either never see the light or appear in some distant periodical. But the general result is duplication, subdivision, want of harmony, and a set of semi-pamphlet publications annually, instead of one goodly volume; some of which find their place, sooner or later, in the omnivorous waste-paper basket. There are four or five fragmentary Society Libraries, and one small collection of illustrative objects; but as these are accessible only to the members of the Society to which they respectively belong, one is forcibly reminded of Franklin's illustration respecting the three countries A, B, and C, which possessed respectively the three commodities X, Y, and Z. Nor is this all, or even the worst. It is humiliating to see that when some paltry public demonstration is contemplated, for which even the weakest of our local societies should be strong enough, there is a formal summoning of "delegates," even from the neighbouring Boroughs of Birkenhead and Bootle, as if we possessed a vast superfluity of intellectual resources,

but were sorely straitened in pecuniary means. Such a proposition is not merely "inexact," as our French neighbours politely say: it expresses the direct converse of the fact.

In accordance with these sentiments, I advocated the union of the three Societies which Liverpool then contained, in August 1844, and the result was that two of them were united in October of that year. It is to this latter date that the first signs of intellectual vitality may be traced; and though for several years after, they were very faint, the printing of Proceedings and occasional Papers was then commenced. Since that date other Societies have been founded,—partly owing to the absence of system, by which important subjects were ignored, or received with a reluctant welcome,—and on the contrary, one Society has been absorbed in this. Attempts have been made, especially in 1853 and 1854, to concentrate these weak and scattered elements; and the members of the two principal societies,—who would unitedly have amounted to nearly 500,—declared again and again in favour of the principle. But, the Council of one of them, without formally declining to carry out the instructions of their constituents, simply neglected to do so; till an opportunity of usefulness had passed, such as is never likely to occur again. Indeed here is the secret of the difficulty. When we speak of ten Societies, it is of ten governing bodies, including ten sets of officers; and men who have borne commissions in the humblest militia regiment, are not always patriotic enough to submit to become privates even in the Guards.

There is another subject, to which if the British Association succeed in drawing marked public attention, directly or indirectly, it will confer a benefit of the highest kind on the town. From the comparative absence of public works in this neighbourhood,—except the extension of docks or the erection of ships, on plans previously known, the highest class

of scientific men find no market for their talent. In the neighbouring city of Manchester, the difference in this respect is very marked; Chemistry and Engineering occupy a high place; and intellect even of various kinds seems to be gregarious, for there also we find eminent cultivators of pure Mathematics, and of other subjects which do not find a market in the commercial sense.

It may be thought, however, that we try to remedy this defect by a noble voluntary effort on our own parts; and that Liverpool has founded a college worthy of the town,—of which the Owens College, Manchester, is a twin sister,—with endowments adequate in amount and sufficient in number, to secure an able representative of every important subject occurring in a general, or in a specific and professional course of education. How shall I, for very shame, state the simple facts of the case? Liverpool contains no College, except by an abuse of the term; it has no endowed Professorships either in Arts or in the Professional departments; it has no arrangement whatever for the support of any teacher in the higher walks of learning; and not a teacher in Liverpool, even in our greatest institutions, holds a life appointment! It is true that we have a "Queen's College" nominally for the preparation of young men for the University of London;—but with no inducement to "Professors," except the fees of a few mechanics and other aspiring lads, a high class of teachers is unprocurable; and the "Professor" is repaid mainly by his titular distinction, which he uses where its actual value is not known. And when was this *quasi* "Queen's College" founded? In 1857, the very year in which attendance at all such institutions was declared to be unnecessary; that degrees would be granted as the result of *examinations* only, without reference to how or where the knowledge was obtained. The Charter was signed on the 27th of August, 1857; and the College was

formally opened by Lord Brougham on the 4th of November following. Thus, even when we move in a right direction, we have the remarkable talent of arranging so as to be just a day too late.

Of late years, there has sprung up, in the minds of some, a fear of Science; which is either (1) a want of confidence in one set of truths, as if they were likely to be overturned by another, or (2) it is a mistake in reference to the subject altogether. I believe that both the timidity and the mistake exist side by side.

The fact is, that thousands cannot distinguish between such related ideas as the following;—(1) Possibility and Probability; (2) Slight-probability and High-probability; (3) High-probability and Moral-certainty; (4) Moral-certainty and Ascertained-fact. Hence it follows, that guesses or even surmises are taken for truths; and suppositions are ranged among ascertained facts. This illustrates one of the errors; but there is at the same time a lowering process, as well as an elevating one. Demonstrable facts are sneered at, by their opponents, as mere probabilities or even possibilities; and the results of experience are treated as doubtful matters of opinion.

In like manner, we have in Science three terms which express different degrees of acquaintance with facts.

1. *Hypothesis*, indicates little more than a mere guess at the solution of a difficulty; and the term has sometimes been applied even to an illustration or similitude. Before modern researches had brought to light certain new facts, we used to speak of the Nebular Hypothesis, which occupied this ground.
2. *Theory*, is that which explains a large number of facts, and is evidently a more or less close approximation to the truth;—but there may be other facts which it fails

to explain, or does so in an imperfect and unsatisfactory way. There are therefore various Theories, as is well known, in connexion with several sets of Scientific facts.

3. *Law.* This term applies only to ascertained facts. If correct, it explains all phenomena of the same kind; and with sensible men it is not called in question, like a Theory or mere Hypothesis.

Now, as truth cannot be opposed to truth, it will generally be found that when such has been supposed to be the case, mere *theory* has been mistaken for *law*. In other words, guesses more or less correct have been opposed to something which is most surely believed among us; and people jump to the erroneous conclusion that it is Science which is so opposed, when it is merely their own fancies.

But this is only half the truth. There are imaginations in Theology as well as in Science, so that we must not suppose the ground of offence, or of difference, to be all on the one side. These show themselves in such circumstances as the following:—

(*a*) In the interpretation of Prophecy, there are imaginative commentators who can take out of a passage a vast deal more than ever was in it; who can support any theory or even hypothesis, no matter how narrow its basis, or overturn any law no matter how generally received. At least they can do so to their own satisfaction.

(*b*) Others again are fond of expounding plain narratives,—*e.g.* the facts in the life of David,—in a spiritual sense; without any authority for doing so, real or alleged, and without pretending to follow any system whether false or true.

(*c*) Another set, like Swedenborg, spend their lives in search of duplicate meanings; and interpret the simplest and most obvious record of facts as if it were an extract from *Gulliver's Travels* or a portion of *Bunyan's Pilgrim's Progress.*

(*d*) Others again, are so fond of symbolism that they convert even facts into figures,—like Origen, who would make the Miraculous Draught of Fishes less a *miracle* than a practical *parable*.

I am afraid, too, that if our views of Paradise were carefully analysed, they would be found to contain at least as much of Milton as of Moses; and the ideas which thousands entertain of disembodied spirits contain a good deal of the materialism of the ancient Heathen, with a flavour of the monkish legends of the Middle Ages. Let us therefore do justice to men of Science. They are certainly not the only offenders against truth; nor are they the sole cause of the divergence which exists between classes whom we would gladly see acting in alliance.

The practical inference is, that the interpreters of natural facts and the interpreters of Revelation, or the cultivators of Science and of Theology respectively, should regard each others' researches with forbearance. Each class has prejudices to get rid of, and truths of importance to learn. There is an old fable respecting a shield which was placed at cross roads, one side of it being of gold and the other of silver; and two knights who had seen but one side of it respectively, learned the whole truth only when each had given the other a mortal wound. There are many such knights in society still; some of whom will not, and perhaps others of whom cannot, look upon more than one side of a controverted question. If the temple of truth had all the incrustations cleared off from its diamond walls which human intellects, including those of learned divines, have added at various times, it would be smaller in magnitude no doubt, but it would be greatly improved in beauty and brilliancy of appearance.

I venture to hope that we shall all undertake the task of investigation in an earnest but yet in a charitable spirit; and

while our triumphs are likely to be as great or even greater, a more becoming spirit, and one more thoroughly in accordance with our innocent and useful pursuits, will in time be widely diffused. And if we cannot add to the mass of human knowledge by the discovery of new truths, we can yet discharge very important functions. The agriculturist, the grazier, or the miner, who produces the raw material for food or for the operations of industry, is no doubt a very important person; but not less important, perhaps we might say more important still, is the manufacturer, the merchant, or the trader,—all of whom adapt these productions to the wants of mankind, or convey the supply to the spot where it is most urgently required. So, in like manner, while we render due homage to him who throws back the veil of ignorance and lets in some new ray of truth on the human mind, we do not hesitate to tender our grateful acknowledgments to any instructor,—whether at the known seats of learning or a practical man in the world,—who makes one or more such discoveries the common property of mankind.

The path of duty which we are called upon to tread is now well known to us;—it is plain but honourable and useful. We have already completed twenty-one journeys, and we now take the first step of another. We do so in circumstances slightly altered;—as we have now a character to sustain, precedents which we are expected to equal or excel, and we have already obtained a position of more prominence than formerly. May our passage to the end of the Session be a pleasant and a profitable one;—for ourselves, our fellow members, and all those who shall either join in our Proceedings or read our Volumes.

THE GRAMMAR SCHOOL, BURNLEY.

By T. T. Wilkinson, F.R.A.S.

(Read April 7th, 1870.)

The Grammar School at Burnley owes its origin to the dissolution of Chantries, in the reign of Edward VI; and has hence been sometimes styled the Royal Free Grammar School, although the pupils were probably never admitted wholly free from charge. A Chantry, dedicated to St. Peter, had been founded at the High Altar, by the inhabitants of the Chapelry, in which mass and other divine service were to be conducted by a suitable priest; and when this was reported by the King's Commissioners, it was stated that—"Gilbert "Fairbanke [was the] priest, incumbent thereof, to celebrate "Mass, and other Dyvyne Service in the said Chapell." Dr. Whitaker is of opinion that the endowments of this Chantry consisted of *copyhold* lands; and the Chantry Commissioners of Edward VI were of the same opinion; "but," they add, "we have not seen the copies, and there be no "reprises." "These lands," says Canon Raines, "were con- "firmed by the Manorial Courts of Higham, during the 6th "Edward VI [A.D. 1552-3], and of Ightenhill, during the 5th "Elizabeth [A.D. 1562-3], with the consent of the Royal "Commissioners, for the use of Gilbert Fairbanke, for life, "and after his death for the use of a Schoolmaster, and the "support of a Free Grammar School in Burnley." (See *Gastrell's Notitia Cestr.*, p. 310; and *Whitaker's Whalley*, p. 327.)

Sir Gilbert Fairbanke survived the dissolution of his chantry for many years. His burial is recorded in the Parochial Registers as that of "Sir Gilbert Fairbanke, Chantrie "Priest of Burnleye, sepult. 29th January, A.D. 1565-6;" and about a year after, the same registers record the death of Sir John Aspdene, the first Protestant incumbent of Burnley, who was buried on the 30th June, A.D. 1567. The title of "Sir" has no reference to knighthood, or the baronetage of later times. It was applied to all clergymen who had not taken a degree at the Universities, but had entered into Holy Orders, after proving themselves duly qualified. They thus answered to the *literates* of the present day. "Such priests," says Dr. Fuller, "as have the addition of *Sir* before the "Christian name were men *not graduated* at the University; "being in *Orders* but not in *Degrees;* whilst others entitled "*Masters* had commenced in the Arts." (See *Wilkinson's History of Burnley Church,* p. 44.) The discarded chantry priest began to officiate as schoolmaster soon after the dissolution of his chantry, and converted his own house, at the west end of the church, into his school. This was continued by succeeding masters, until the present school-house was erected, upon land given by Robert Parker, Esq., of Extwistle, in A.D. 1693. The first head master had granted to him 17 acres, 1 rood of land, in Habergham Eaves; but this appears to have reverted, on his death, either to the incumbent of St. Peter's church, or to the original grantee.

The earliest actual endowment of the school was the one confirmed at the Halmot Court for the manor of Ightenhill, held in A.D. 1562-3. On that occasion—"John Aspdene, "clerk, executor of Geoffrey Wilkinson, deceased, surrendered "to Laurence Habergham, of Habergham; John Parker, "junior, of Extwistle; Simon Haydocke, junior, of Heysand-"forth; John Barcroft, junior, of Barcroft; and Robert, son "of Thomas Whitaker, of Holme; one messuage, one

"*horreum* [barn], one garden and toft, in trust, to be applied "after the decease of Gilbert Fairbanke, clerk, to the foun- "dacion, support, and maintenance of one Free Grammar "School; founded, or erected, in Burnleye; and for the "mayntenance of a Schoolmaster in succession, to teach "children, and young men, from time to time, for ever."— (*Wilkinson's History*, p. 24.)

"On the 4th April, A.D. 1558," says Canon Raines, "Richard Woodroffe, of Burnley, granted to Roger Haberg- "ham and others, an annual rent of 3s. 4d. out of lands in "Barnoldswick, in Craven, in the county of York, for the "use of a Grammar School, erecting, or about to be erected "in Burnley." This apparently small amount was not inconsiderable at the period when it was granted; but it has long been lost in consequence of payment not having been demanded.

"On the 4th of February, A.D. 1577, John Ingham, of "Whalley, granted to Richard Towneley, Esq., and others, a "rent of £3 annually, out of a messuage called Alfrethes, in "Farnham, Essex, which had been assured to him for that "purpose by Sir Robert Ingham, clerk, his uncle, for the "maintenance of a Free Grammar School at Burnley, or "Colne, for ever." The Inghams formerly resided at Fulledge, near Burnley, and built or rebuilt the house there. They had, on several occasions, intimate relations with the Towneley family, and this may perhaps account for the preference of Burnley Grammar School to that of Colne; for the latter had only an endowment of ten shillings yearly up to A.D. 1687, when it was increased by Thomas Blakey to forty shillings per annum.

Dean Nowell, of Read, some time Master of Brasenose College, Oxford, provided thirteen exhibitions, for six years, of £3 6s. 8d. each, to that college, for pupils educated at Middleton Grammar School, which he had recently founded

and endowed with £30 per annum. In case this school could not supply the requisite number, then preference was to be given to pupils from the schools at Burnley and Whalley. These exhibitions were founded about A.D. 1570-72, and were afterwards merged into *two of* £20 each, which were to be shared between Middleton and Burnley. Both of these, however, have long been lost in consequence of not being claimed by any students from either of these schools; and the income from Dean Nowell's bequest is now included amongst the general property of the University of Oxford.

The various endowments of the Burnley Grammar School were summarised in A.D. 1702, by Benjamin Robertshaw, who signs himself "Incumbent of the School." The list is as follows:—

RENTS BELONGING TO BURNLEY SCHOOL, A.D. 1702.

	£	s.	d.
Alfrethe's farm, in Essex	3	0	0
Wakefield, rent from	3	6	8
Dalton, rent from.....	0	9	0
Barnoldswick, rent from.....	0	3	4
Foulridge, Ingham's tenement	6	10	0
Burnley, Tarleton's tenement	4	15	0
Ackerley's tenement	6	7	6
Cockridge tenement (half)	2	16	3
Total	£21	7	9

Of most of these bequests the deeds are said to be "at "Extwistle," and hence we may presume that the Parkers were the custodians of the property of the school at this time. The rent from Dalton, of which nothing is now known, was secured by a deed dated the 21st September, in the 26th Elizabeth, or A.D. 1583-4.

The next account we have of the Grammar School and its endowments is that supplied to Bishop Gastrell, 17th November, A.D. 1719, by the Rev. Richard Kippax, at the

Visitation held at Blackburn. He says—"There is a school "[at Burnley] *free* only to the inhabitants of this chapelry. "The salary of the Master is £20 per annum, clear of all "charges; who is nominated by four Feoffees, the Curate, "and substantial inhabitants. The writings are in the hands "of Robert Parker, of Extwistle, Esq. There is £3 12s. "a-year from lands in Alverthorpe, Yorkshire; 5 marks a-"year on lands given by Mr. Sagar; in A.D. 1696, the Rev. "Edmund Townley, Rector of Slaidburn, gave Ackerley's "tenement; Nicholas Townley, Esq., of Royle, gave in A.D. "1699, a tenement called Cockridge, in Briercliffe, equally to "the Church and the School; 9 shillings a-year from a farm "called Dalton, near Huddersfield, given 26th Elizabeth; "10 shillings from an estate called Wanles, near Colne. "Vide nomination, anno 1693." (See *Gastrell's Notitia*, by Raines, pp. 313-14.)

A further account of the endowments of this school is contained in the report of the Charity Commissioners, dated July, 1825. The first article states that the school was founded, "it is supposed, in the reign of Edward VI." In subsequent articles we are told that "in A.D. 1641, John "Parker, of Extwistle, feoffee, surrendered a close or parcel "of land, at the lower end of Saxifield, containing 2 acres, "1 rood; and another parcel on the common called Broad-"head Moor, containing 30 falls of land." This was conveyed to John Parker, son and heir of Robert Parker, of Netherwood, and George Halstead, son and heir of George Halstead, of Bank House, and their heirs. Richard Woodruffe, of Burnley, granted 3 shillings and 4 pence, annually, out of his tenements at Barnoldswick, "for maintaining a "Grammar School at Burnley, for ever." By indenture dated "4th February, A.D. 1577," John Ingham, of Whalley, granted the rent-charge of £3, on a farm called Alfrethes,

near Farnham, in Essex, "towards the maintenance of the "Schoolmaster at Burnley, for ever." This rent-charge has been conveyed to new trustees, from time to time; and by indenture dated 5th and 6th February, A.D. 1787, Edmund Townley, "surviving trustee," conveyed the same to Banister Parker and four others, of whom the late T. D. Whitaker, LL.D., F.S.A., was the surviving trustee. This portion of the school property was sold, about the year 1850, for £78 net. The proceeds lay in the hands of Messrs. Alexander and Co., solicitors, Halifax, until June, 1858, when both the sale of the property and the custodians of the money were ascertained, in consequence of the then Attorney-General applying to the Trustees of the School for the payment of his bill of costs in creating a new set of trustees and other business.

The next endowment is described as "a farm at Alver-"thorpe, in Yorkshire," containing "5 marke lands." This was bequeathed by the Rev. Oates Sagar, Vicar of Warmfield, who was a native of Burnley, and had probably been educated at the school. The sum of 37s. 8d. of this is said to be "in the tenure of Roger Beckett; in the tenure of Old "Dawson 8s.; and in the tenure of his son 4s.; if they "continue and maintain their school; and the residue lack-"ing of the five marks to be taken from my lands near "Wakefield." In A.D. 1590, William Townley and others, "feoffees of the school," surrendered the preceding bequest to William Sagar, of Catlow, for a term of 200 years; and in A.D. 1647, "William Sagar, junior, and Jennet his wife," also "Oates Sagar, of Burnley, and Isabella his wife," in consideration of £79, surrendered the said premises, (except an annual rent of £3 6s. 8d. payable to the master of the Free School of Burnley, and his successors) to Thomas Aspden, then master of the school. Dr. Whitaker condemns

the preceding transactions, since they kept the property out of the hands of the trustees until A.D. 1790, when the full value of this property reverted to the school estate.

The rent-charge at Alverthorpe, with the bequests of Edmund and Nicholas Townley, are then enumerated; as are also those from Wanless, near Colne, and Dalton, near Huddersfield. The former of these two is said to be derived from property belonging to Thomas Parker, of Browsholme, Esq., but its origin is unknown; the latter rent-charge of 9 shillings yearly is said to have been granted "21st April, in the 26th "Elizabeth, [A.D. 1583-4,] and was formerly payable by Sir "John Kaye." Several of these small bequests have been lost for want of attention on the part of the trustees or their agents, and the then property of the school is thus tabulated by the Commissioners:—

I.—"A cottage in Burnley and dwelling-house.

II.—"Another cottage, barn, and garden.

III.—"A field in Burnley Lane, containing 2 acres, 1 rood, "31 perches, customary measure of 7 yards to the perch."

The first and second of these formed what are now called the White House and Dixon's Mill; both were sold some years ago, subject to fixed ground rents, in order to pay off the then Law Clerk's bills for legal expenses incurred and services rendered during the time he held the office under the then trustees. The field in Burnley Lane has been leased for building plots, and now forms one of the most valuable of the endowments.

IV.—"The estate at Alverthorpe contains 6 acres, 3 roods, "22 poles, and is let at £44 per annum."

V.—"Ackerley contains a house, barn, and 11 acres, 2 roods, "33 poles of land." This is now let to the executors of the late John Hargreaves, Esq., for the sum of £44 per annum. The lease expired in February last, and this estate will now realize a considerably larger annual rent.

VI.—"Cockridge [or Cuckoo-ridge] contains house, barn, "and 8 acres of land. Also the tenant has the privilege of "turning cattle on to the moor."

Two rent-charges are reported as "not having been col- "lected for more than thirty years;" and the whole income of the school from its endowments is returned at £137 16s. per annum.

The Rev. John Raws was the head master at the time of this inquiry, having been appointed twenty-eight years before [A.D. 1797] by the Rev. John Hargreaves "as the then "surviving trustee." When Mr. Raws became head master, the fees for each scholar were £2 2s. per annum, for which they were taught "English Grammar, Writing, and Accounts." These fees had been agreed to in lieu of *admission* and *cock-penny* at Shrovetide. He had then an assistant master, who taught "English, Writing, Accounts, and Practical "Mathematics; his salary being £100 per year." The average number of scholars was given as 60, boys and girls, of whom 10 or 12 were instructed in classics.

On May 29th, 1849, Mr. Elijah Helme, agent to the Rev. Wm. Thursby and General Scarlett, reported to the trustees that the coal mines under the school property at Alverthorpe did not appear to possess any material value. This examination was preliminary to a meeting of the trustees, held "July 2nd, 1849," at which it was resolved "that Messrs. "Alexander and Hammerton," solicitors, should "take imme- "diate steps to present a petition to the Court of Chancery "for the necessary powers to enable the trustees to *lease*, *sell*, "or *exchange* . . . certain property belonging to the "School." Accordingly, on August 8th, 1849, George Stansfeld and Thomas Holgate, Esqrs., petitioned the Court of Chancery that the master of that court should be ordered to make inquiry whether the estate of the Burnley Grammar School "should be *sold*, or *exchanged*, or otherwise." He

had also to suggest what powers should be granted to the trustees for "selling, disposing, or beneficially using or "working the said estates, or any part thereof." The Lord Chancellor thereupon issued a decree, bearing date "16th "August, 1849," authorising such inquiry; and the master presented his Report on the "18th July, 1850." In this document he advised that *six new trustees* be created, from persons resident in the Chapelry of Burnley, any *one* of whom could act in the matter of the trust by appointing trustees whenever necessary by the death or removal of his colleagues . . . that power be given them to lease ground plots for 999 years . . . and to lease the landed estates for terms of 21 years, or less, if found convenient or advantageous. By an order of Lord Cranworth, dated "14th March, 1851," the new trust was created—power to lease, &c., was given—and the trustees were empowered to *sell*, if necessary, the following portions of the school estates:—

I.—The coal under Alverthorpe.

II.—The moiety of Cockridge.

III.—The rent-charge at Alfrethes.

IV.—The Rent-charge at Alverthorpe of £3 12s., arising out of Shaw's Fields and Nathan's Deans; two detached portions of the Alverthorpe estate.

They were also empowered:—

V.—To exchange the Old Road leading to Ackerley's Tenement, now Ridge Farm, from the top of Brunshaw, for the one which the late Colonel Hargreaves had opened instead. In case this exchange was agreed to, the road was "to be kept "in good repair by the Executors and their heirs for ever." An additional clause was added, by which the trustees were enabled to raise:—

VI.—The sum of £1,000 for the erection of a house for the Head Master. If the sales of property did not bring in a sufficient sum, then, "a portion of the ground rents was to

"be reserved, set apart, and appropriated to the purpose of "purchasing a plot of land and building the said School "House;" the rest of the proceeds of sales, reserved ground rents, &c., "to be laid out in improvements on the Charity "Estates."

We have seen that this application to Chancery was an expensive affair, since the rent-charge at Alfrethes had to be sold in order to discharge the Attorney General's bill of costs. The Master's house has not yet been erected; and a minute made by the Law Clerk to the Trust, dated April 11th, 1853, states that Messrs. Alexander and Hammerton "had agreed "to take an annual instalment of £40, with interest from the "20th May next, in payment of a bill of costs amounting to "£200, the first payment to become payable on the 20th "May, 1854." Some months later Holden Hammerton, Esq. emigrated to New Zealand, without resigning his offices of Trustee and Law Clerk to the Trust. This necessitated another application to Chancery for "the appointment of "new Trustees, and to vest in them the legal estate of the "property of the School." This was another expensive proceeding, and hence it was ultimately found necessary to dispose of the cottages and mill plot in Burnley, in order to discharge a portion of the liabilities incurred. These tenements, when sold to Charles Towneley, Esq. and Mr. Henry Dixon, produced an annual rental of £59 18s., which was thus rendered perpetual, the property being disposed of subject to this annual ground rent. In 1862 the total annual income of the School Trust amounted to about £276; but this has since been increased by some additional ground rents, and is now probably not far short of £300 per annum. This will again be further increased when Ridge Farm is relet or disposed of as building plots for villa residences.

The inadequacy of the accommodation afforded by the School house, erected in A.D. 1698, has recently led to

several projects for erecting larger and more commodious premises. In 1855 it was proposed to erect houses for the Head and Assistant Masters, at a cost of £1,800;—two schools, class rooms, &c., at a cost of £2,500;—land, walls, &c., of the playground, estimated at £1,000;—total £5,300. The value of the present school premises was supposed to be £700; so that there would remain £4,600 to be raised by public subscription or otherwise. This scheme was ultimately abandoned as too expensive. A second scheme was subsequently proposed by which additional accommodation was to be provided at a cost of about £2,000, and towards this about £900 were promised as subscriptions; but owing to a difference of opinion between some of the promoters this project also was abandoned.

The present state of the Grammar School, both as respects the buildings, the Masters, and the pupils, has recently been reported upon by James Bryce, Esq., D.C.L., one of Her Majesty's Commissioners. He says—"As in the case of so "many of the Lancashire towns, the number of boys in "attendance (51) is very small compared with the population "of the town (30,000), and the adjoining district (probably "50,000 within a three-mile radius). This cannot be ascribed "to the classical character of the school; for not more than "one-half of the boys learn Latin, and only one-tenth Greek. "The remainder take the English subjects only, together with "occasional (weekly) lectures on Chemistry and the elements "of Natural Philosophy, given by a visiting master, certifi-"cated by the Science and Art Department. The Head "Master is an estimable and cultivated man, and earnest in "his work. The Second Master is also a zealous teacher "and a mathematician of some note.* The not quite satis-

* See his "History of English Mathematical Periodicals," in *The Mechanics' Magazine*, 1848–58; also his Essays on "Bisectant Axes," "Circles of Tangen-"tial Ratio," "Similar Conics," &c., &c., in the Appendices to *The Lady's and*

"factory state of the school is mainly attributable to the "roughness of the boys, who mostly belong to the lower "middle class, and come in an imperfect state of education; "and to the wretched building in which the classes are taught, "and which is alone sufficient to dishearten both masters and "boys. Burnley is one of the newest and roughest of "manufacturing towns. The rich people send their children "to schools at a distance; and the bulk of the middle class "withdraw theirs from school at fourteen, or as soon as they "can write clearly and cipher easily. In such a place very "little store is set upon learning or culture; classics excite "hostility, and although the value of instruction in Mathe-"matics and Natural Science (more particularly Chemistry "and Geology) will in time be appreciated by a population "engaged in manufacturing and mining pursuits, it would at "present be regarded with indifference. The Head Master "desires to see a boarding house established, thinking that "the presence of boarders would temper the roughness of "the town boys, and attract a greater number of the sons of "richer people as day scholars. A manufacturing town, "however, is not the place where a boarding school is likely "to succeed; and though it may fairly be tried, the first "business of the school evidently is to give a thorough "plain education to the sons of the manufacturers and shop-"keepers in the town. There is a considerable feeling for "the Grammar School in the town; and all that I heard went "to shew that if a good building were erected, and if it were "understood that the school would give a sound commercial "education, teaching Latin, but not making it compulsory, "an attendance of 150 boys and upwards might be counted "upon."

Gentleman's Diary; also an Article on "English Mathematical Literature," in *The Westminster Review*, April, 1851; and "The Lancashire Geometers and "their Writings," in *The Manchester Memoirs*; &c., &c.

Nothing need be added to this account, except that the school house is more dilapidated than it was at the period of Mr. Bryce's visits. There is, however, now a *third* project on hand for erecting more commodious school premises, on land proposed to be given by General Scarlett one of the present trustees; and the Town Council of Burnley has memorialised the Board of Commissioners to relax some of their regulations, and thus enable the trustees to carry out their present scheme. It is also proposed to make the Rector and the Mayor of Burnley, for the time being, *ex officio* trustees; and to give to the Town Council power to elect three other trustees out of their own body, one of these to retire annually. The present five *life* trustees to remain, and to have the power of filling up vacancies in their own body, in case of death, &c.

In a room on the south side of the second story of the present school there are about 1,000 volumes of the then valuable library left to the Masters by the Rev. Edmund Townley, Rector of Slaidburn, and the Rev. Henry Halstead, B.D., Rector of Stansfield in Suffolk. The latter donor in his will says—"I give and bequeath to the Master and "Feoffees of the Free School in Burnley, in the County of "Lancaster, all my Library of Books in my possession in "Stansfield, as shall be set down and left in a Catalogue "thereof made; to be used and taken care of by the Protest-"ant Master and Feoffees of the said School in Burnley, and "their successors for ever." The catalogue above alluded to still remains in the library, and also an oil painting of this donor, said to be by Sir Godfrey Kneller; but the books are mostly in a dilapidated condition, and the portrait is still without a frame. Successive head masters do not appear to have considered it any part of their duty to keep the books in repair, nor have the successive feoffees ever set apart any portion of the endowments for that purpose. A black letter

Chaucer, a copy of Bryan Walton's *Polyglot Bible*, and an early edition of Stow's *Survey of London*, may be mentioned as some of the most curious and valuable works in this collection. There are also a few scarce works on the controversies of the Commonwealth period.

Very little is known respecting the head masters of the Burnley Grammar School. Sir Gilbert Fairbanke has the credit of being the first master of an endowed school in Burnley; but whether his salary exceeded his pension as chantry priest cannot now be ascertained. The school house, however, previous to the erection of the present building in A.D. 1693, was that which formerly belonged to the officiating priest at one of the chantry altars. About A.D. 1557, and during the lifetime of Sir Gilbert, one James Hartgrave was master of a school in Burnley, but whether of the Grammar School is not certain, and he had the high honour of being "the first "that did teach worthy Doctour Whitaker," the Cambridge professor and controversialist. In A.D. 1597 a Mr. Bancroft was head master; and in A.D. 1647, we have seen that "Thomas Aspden [was] then master of the school." Benjamin Robertshaw was not only head master for nearly thirty years, but he also kept the Registers of the Parochial Church, and enriched them with several memoranda of considerable interest. He died in A.D. 1728, and was buried outside the church under the east window. His tombstone contained a long Latin inscription, most of which had become illegible many years ago. The slab itself has recently been cut into pieces, and now forms part of the flagged footwalk leading to the south-east door of the church. Mr. Robertshaw was succeeded in the mastership by Mr. Ellis Nutter, whose altar-tomb still remains entire. He died in A.D. 1761, aged 54, after having been master thirty-three years. The Rev. William Halliwell, curate of Holme, was appointed to succeed Mr. Nutter, and he retained both these offices until his death in

1796. The Register thus records his burial:—"The Rev. "William Halliwell, Master of the Grammar School, Burnley, "and Curate of Holme. Interred December 24th, 1796." The Rev. John Raws was elected master in 1797; and had the honour of being the tutor of Canon Raines, a Lancashire antiquary, whose name is now "familiar as a household word." He has written and edited many valuable works for the Chetham Society, and has also collected about fifty volumes of Lancashire MSS. which will hand down his name and industry to many future generations. Mr. Raws died in 1835, and was succeeded by the Rev. S. J. Allen, M.A., author of *Lectures on the Church of England*, delivered before the University of Cambridge, and of several other works. He collected about fifteen folio volumes of *Church Antiquities*, but they have never been published; and he also assisted the late Edward Baines in his *History of Lancashire*. Mr. Allen obtained the Vicarage of Easingwold, near York, and removed thither in 1839. He was succeeded by the Rev. F. N. Highmore, M.A., who vacated the mastership in 1842, on obtaining church preferment in Derbyshire. He was followed by the Rev. James Butler, D.C.L., the present head master, who has had the honour of educating Philip Gilbert Hammerton, Esq., author of *Heraldry*, *Isles of Loch Awe*, *A Painter's Camp in the Highlands*, *Wendelholme*, and several other works. Mr. William Angelo Waddington, who received his education at this school, has recently published an elegant and meritorious work, entitled *Architectural Sketches in and around Whalley*, accompanied by historical and critical descriptions. The author of this paper is the present Assistant Master, and in addition to the Memoirs previously mentioned, he may be permitted to refer to his *History of the Parochial Church of Burnley*, published in 1856; to various Essays in the Transactions of this Society;

and to the joint authorship of *Lancashire Folklore*, published in 1867.

It thus appears that the Grammar School at Burnley has done some good work "in its day and generation." Under new regulations, active trustees, able masters, and better premises, it will no doubt continue its career of usefulness, and do honour to the Borough in which it is situated.

FACTS AND SUGGESTIONS CONNECTED WITH PRIMARY EDUCATION, WITH ILLUSTRATIONS FROM THE BOROUGH OF LIVERPOOL.

By the Rev. A. Hume, D.C.L, LL.D., &c., President.

(Read March 24th, 1870.)

Introduction.—The Paper which I am about to read to you originated in the following circumstances. While the materials were in course of collection, on which the Education Bill now before Parliament is partly based, I was requested, by a gentleman in authority, to put my views on the whole subject into writing,—taking special notice of some peculiarities of Education in Liverpool. This was in the early part of December, 1869. He was good enough to say that my long familiarity with the subject, and my deep interest in it, as well as the fact that I occupy a sort of official position, as Inspector of certain local Church Schools, would invest the statements and suggestions with some authority and would attract attention to them. I promised to comply: but although aware that time pressed, it was the 25th of January before I was able to fulfil my engagement. This, however, was nearly a month previous to the introduction of Mr. Forster's Bill—the date of that event being the 17th of February.

The intention was, on the part of the gentleman to whom the Paper was forwarded, that it should be printed in whole or in part, and placed in the hands of Members of Parliament, along with the Reports of the Government Commissioners; but owing to difficulties,—arising, as I infer, from the rapidity with which it was necessary to print those Reports,—he was unable to carry out his plan. Accordingly, he returned the

manuscript to me on the 16th instant; with an explanatory note, in which the hope was expressed, kindly and earnestly, that it might serve its purpose in some other way.

On a re-perusal, I was struck with the large amount of coincidence which exists between these views sketchily given, and those provisions which Mr. Forster has embodied in his Bill and developed in his speeches. But, though the general principle of the Bill has been affirmed,—which is the effect of a second reading,—the success of some important details is still doubtful; and there are others to which public attention has never yet been sufficiently drawn. I submit the Paper, therefore, to the judgment of intelligent men, the members of a Learned Society; and I venture to hope that the printing of it, and the issue of a few copies at the present moment, may serve an humble yet not unimportant purpose. For example, it may assist in strengthening the hands (1) of those who would retain what is good in the proposed legislation, or (2) of those who would correct or supply what is yet imperfect.

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1. *Ignorance, Pauperism, Crime.*—It is, happily, unnecessary to enter into any elaborate dissertation on the importance of Education. The public are already satisfied of its importance, and Parliament is beginning to recognise the character and the intensity of public sentiment. Without troubling ourselves to inquire which is the cause and which the effect, it is important to note that Ignorance coincides to a great extent with Crime, and also with Pauperism. Though few will doubt this general proposition, I am happily able to illustrate it from personal researches in this great town. Within our Borough limits, there are fifty-eight Ecclesiastical Districts; and the one which is specially the home of the dangerous classes is exceptional in possessing no Schools of

its own. Even if it did, it is very doubtful whether they could obtain adequate support; and certainly this would be impossible within the parochial limits. The second in order as the home of the criminal population, is also without Schools of its own; and these two districts, which form one continuous area, embrace a population of 24,800.*—The connexion of Ignorance and Pauperism is equally clear. Of the three districts which contain the largest number of pauper streets, not one supports a School of its own; though as a very exceptional case, which in the poorest parts of the town ought to be the rule, Schools are supported in two of them by a society formed from the town at large. Yet these three districts comprise a gross population of 37,637. They also adjoin each other, forming one continuous area, and they are equivalent of themselves to a large town.

2. *Demand and Supply.*—Anomalous as the statement may appear, both the *demand* for Education and its *supply* are deficient. This amounts to saying (1) that the people do not desire light as they ought to do; and (2) that if they were to do so, it would be found that the lamps have not been placed at the darkest and most dangerous spots. We find the same facts associated with other good things. People do not desire as they ought to do, the consolations of religion; or arrangements conducive to health, or recreations of a moral and elevating kind. And if they were to do so, it would be found that the material aids, for all these and similar purposes, are most absent just where they are most required. In all such cases, the intelligent must make advances to the ignorant, for the purpose of benefiting these latter, and saving them from themselves. And a well-regulated selfishness should be blended with our benevolence; because it is desirable and

* "State and Prospects of the Church in Liverpool," by the Rev. A. Hume, LL.D., D.C.L., containing two coloured maps. Liverpool, Holden; London, Rivingtons, 1869.

necessary for *our* sakes as well as theirs, that their condition be improved.

3. *Number of Uneducated.*—What is the actual or approximate number of the uneducated classes? This is an important question; for on the reply to it the remedy in some degree depends. It is not to be supposed that the same course would be pursued, (1) if there were a million of children, in town and country, educated only in the school of vice and idleness, and (2) if there were only 200,000 or a fifth of that number.

The advocates of one course of policy therefore exaggerate the actual number, in order to give an undeserved weight to their arguments; the advocates of another course diminish the actual number, for a similar reason. One who has no party or personal purpose to serve, and who desires only to arrive at truth, will try to avoid both errors. I will not attempt to reply to the inquiry in figures, I will merely state principles.

4. *Means of judging.*—It has been found on examining the condition of a large number of Schools, that the number of children "On the Books" is to that in "average attend-"ance" nearly as 4 to 3. In localities where pauperism or absolute want is unknown, the attendance rises, and is more nearly equal to the number on the books;—on the other hand, where wealth is unknown, comfort rare, and the commonest necessaries frequently in defect, the attendance sinks as compared with the number on the books. On the whole, however, of 1000 children of various ages, in nominal attendance, there are 750 actually present on any particular day. Now, one class of public men infer from these data that only 750 are educated, and that the remaining 250 are "gutter children" or "street arabs;" whereas the whole 1000 are under education, though they are not all present on the same day, even under the attraction of a school treat. Farther, the expression "On the "Books," is defined as meaning those who have attended once or oftener during the previous three weeks; so that

children in whose continuity of attendance there has been a longer *hiatus*, are reckoned, almost as a matter of course among the neglected and uneducated. It is true that little progress can be made under frequent and prolonged interruptions; but the fact is still there, that these children get a share of education, though a very insufficient one. Nor must it be inferred, on the other hand, that *all* children thus share in the advantages of education. When allowance has been made for every case, down to those who lose almost as rapidly as they gain, a large number still remain who are *wholly* uneducated.

5. *Illustrations of the principle of Comparison.*—There are numerous other cases, more or less analogous. If a ship's crew be found to possess only half provisions for the remainder of their voyage, the "hands" are put on short allowance. No one supposes that one half will eat up their usual quantity, leaving the other half to starve; or that they will all consume the ordinary quantity, and die together at the end of half the period. Yet, men who are very familiar with such a common fact as "short allowance," never think of applying it to Education.—Again, Mr. Horace Mann tried to estimate how many of a worshipping community there were in England and Wales, from the data contained in the Census of Religious Worship, taken in 1851. He estimated that among members of the Established Church and Roman Catholics, those who are present at all on any given Sunday, represent just *half* of those who attend public worship more or less regularly. Hence it follows, on the same principle, that of the children of educational ages attending school, we should add to the 750 present on any given day, not 250 merely, or 33⅓ per cent., but probably 375, or 50 per cent. Even this computation would leave a large number either beyond the range of the Schoolmaster, or very little influenced owing to incompetent teachers; —all steadily drifting towards the pauper and criminal classes,

that is to say, gravitating towards the workhouse and the prison.

6. *Effects of apathy, &c.*—But, as neither poverty nor crime is an invariable effect of ignorance, so ignorance is not invariably caused by poverty. Indeed, the cases in which children are uneducated through utter want of the means, are comparatively rare; and one difficulty which the Education Aid Society of Liverpool has to overcome,—as that of Manchester had formerly,—is that frequently parents can not be induced to send their children to school even when benevolent persons combine to pay for them. Sometimes this is the result of apathy, sometimes of ignorance, and again of selfishness; for there are many in society who regard nothing as good unless it tends to fill the pocket or the stomach, and nothing as evil, unless it tends to diminish their gains or bring them within the grasp of the law. And, as selfishness is always shortsighted, the present penny is preferred to the distant and prospective pound. "It is undeniable "that in a great town there are many thousands who lead a "mere animal existence, who have no desire for intellectual "pleasures nor appreciation of their usefulness; and it is not "likely that they will expend their funds, or their children's "time, for any such purpose, where amusement or profit "interferes to any extent."*

7. *Compulsory Education.*—It is for this class, mainly if not exclusively, that *compulsory Education* is required;—in other words, for parents who will not spontaneously and voluntarily discharge a certain set of important duties. But *is compulsion necessary?* Will the end justify the the means? I have no hesitation in replying,—Certainly. If inadequate training or bad training affected the individual only, we might leave him to be punished by the operation

* "State and Prospects of the Church in Liverpool," p. 81.

of moral laws. But, as every ignorant or misguided man is more or less of a dead weight on the community, and threatens to require and demand either support watchfulness or punishment, neglect of education is a virtual *crime* as well as a *sin;* and on the other hand, the promotion of education is not only morally good but a portion of State policy. The man who gives his child an inadequate supply of food is punished by the civil magistrate; and why should we be so strict in material things and so lax in things mental and moral? "To minimise the possibility of danger, "a parent is obliged to submit his child to vaccination; and "so it is hard to see why he should be permitted to rear "recruits for our reformatories, jails, and workhouses, any "more than he should be permitted to rear a brood of "wolves or rattlesnakes, and let them loose among our "children."*

8. *A Conscience Clause.*—Now, in order that Education may permeate every stratum of society, it should (1) be improved in character, so that like good medicine it may produce the largest amount of healing effect; (2) the means of support should be increased and laid more equally upon the shoulders of the community; and (3) all stumbling-blocks should be removed. I will notice here only the last of these points. I believe that in every School which professes to be public, there should be in practice a "Conscience Clause;" and if it exist on the simple ground of equity, without the interference of statute law, all the better. In large towns this is to a great extent unnecessary, for there religious communities sort themselves, or act on the principle of self-classification; but as Adam Smith has shown, the division of labour cannot exist unless the market is sufficiently large. Now, in rural districts where only one School can be supported, and even that

* "State and Prospects of the Church in Liverpool," p. 32.

with difficulty, it is idle for the minister of the popular faith to say, "We do not want your children—why do you trouble us?" If the School be a *private* one, there is some reason in his appeal; but if it be supported in whole or in part by public funds, it is his business to show why he lays any prohibition upon education, and virtually closes his doors to those in whom his supporters (the State) have an interest. Besides, there is an ancient statute of universal application, which has never yet been repealed, enacting that "all things, whatsoever "ye would that men should do to you, do ye even so to them."

9. *Importance of Religious Education.* The further question, however, is openly discussed,—Why take cognisance of Religious Education at all? Why not throw controverted subjects overboard, train the intellect merely, and live in peace? To this there are various replies. One is, that it might then be said, in England as it was long ago in Palestine, "they have healed the hurt of the daughter of my people "slightly, saying Peace, peace, when there is no peace."—A second is that Revolution and Reform are not the same thing, nor are the terms convertible in any known language; and such a course of procedure would be like amputating a man's head in order to get rid of a dirty face. It would surely be easier to wash the latter.—Another is, that some religious bodies carry the niceties of their faith into ordinary School subjects, as History, Geography, and Astronomy; in the same manner (but not to the same extent,) as some of the Eastern nations intertwine their faith and their cosmogony. To remove all possibility of objection, therefore, would be to emasculate even our secular education, and to pare down the common platform till we should hardly be able to find standing room. On the theory of perfect secularism, it would be difficult, to use no stronger term, to teach the History of England during the sixteenth and seventeenth centuries. The strong point, however, is, that Religious Education is practised *too little*,

rather than *too much*. Every reader of our newspapers is aware that many of the most revolting crimes of the day are attributable to the absence of all religious feeling, and to the denial of a future state of existence. Many thousands openly avow their disbelief in things spiritual, and generally in Revealed religion; and thus they live without God and without hope. They are simply, according to their own showing, human animals making the best of this world during their short time, *per fas et nefas*, but no more accountable hereafter than the Gorilla or the Chimpanzee. I am no bigot and no alarmist, nor can I sympathise with those who would prefer the darkness of ignorance, on the one hand, to mere secular education; or on the other, to its admixture with some form of Christian faith which they disapprove. But I am convinced that a system of mere secular education would tend largely to increase this class of persons, aggressive and offensive if not dangerous, in spite of all the supplementary Religious Education which the new circumstances would call into existence.

10. *The Denominational System.*—Whatever may be the defects of the Denominational System, it is unquestionable that it has achieved a great work in England. And, as I desire of course to tell the whole truth, let me add that not the least is the conversion of many of the clergy of the old school, who doubted the expediency of educating the common people at all. They have not all died out yet; but he would be a bold man who would now stand up before any audience in the kingdom, as the advocate of Ignorance. From being if not the opponent, in too many instances merely the luke-warm supporter of Education, the Church has come to be virtually the educator of the country;—and no class of the community have made such sacrifices in the cause as those who used to fear its rivalship,—viz., the Clergy. Silently and not slowly, a school or set of schools rises under the shadow of every church spire; until she is found educating about 80 per cent.

of those who require Government aid, though claiming only 67 per cent. as those to whom she specially ministers.* Yet, strange to say, it is just at this time that the advocates of secular education interfere. The Sibyl demanded the same price for six books which had been refused for nine; and so, men who are losing rapidly in the weight of argument, often try to supply the deficiency by an increase of boldness. The Church has done her duty and performed more than her share;—why then is it that some say she must do so no longer? Enormous sums have been raised that children might be trained for eternity as well as for time,—the money is taken, the material aids are accepted, buildings, furniture, &c.,—but the contract is to be broken, the conditions are to be declared illegal! Instead of supplementing that which is imperfect, the cry is to subvert that which is good!

11. *The Congregational System Fails.*—I have spoken of the defects of the existing state of things, one of which requires special notice. The connexion of religion with education has a tendency to make schools *congregational*, not merely those connected with the Church of England, but those belonging to Nonconformists. In the former case, the clergyman has a specified area and population, a definite "cure"; and for the people within those limits both church and schools are intended. In the latter case, though there may be no such limits, the support of the schools falls naturally upon the worshipping congregation of the church or chapel. But these areas of voluntary taxation become in special cases quite too small; and amid the dense pauper populations of our great towns, apart from external aid, (which is now seldom and more-seldom given beyond the parochial limits of the donor,) the support of a school under the present system becomes utterly impossible.

* "Journal of the Statistical Society," for June, 1855,—Dr. Hume's Evidence before a Select Committee of the Lords on Church Rates, 5th August, 1859.

12. *Rich and Poor Districts.*—I have written so fully and so frequently on this subject, that I will merely refer and not repeat.* But, in general terms, the results are such as are inseparable from the voluntary system in education, especially in large towns, each minute section of which consists of a population chiefly of one grade. The facts are somewhat like the following.

a. Some Ecclesiastical districts are too rich; they require *no* public support, and should not have *National* schools at all. Others are too poor; from 50 to 80 per cent. of the children cannot pay even a penny a week; and it is absurd and cruel to make such places conform to the regulations which are suitable enough in average cases.

b. The supply of aid is in the *inverse ratio of the demand;* that is to say, where the necessity is greatest the assistance is least, and where the necessity for external aid disappears, it exists in lavish abundance.

c. The following is an illustration of the *degree* in which the evil exists; but it does not by any means show its intensity. In district A, the necessity for a National school is three times as great as in district B; but in the latter 6*d.* a week is readily procurable, while 1*d.* cannot be got in the former,—and voluntary subscriptions amounting to £5 can be had in the latter as easily as £1 in the former. To maintain the work of education, therefore, and to secure the necessary funds, the task is fifteen times as great in the one case as in the other. It is useless to expect from every clergyman the self-sacrifice which is necessary. Accordingly some abandon the work

* Report of the Select Committee of the Lords on the Means of Divine Worship in Populous Places, (1858) p. 461;—Dr. Hume's Condition of Liverpool Religious and Social, (1858) pp. 23, 24;—Authorised Report of the Church Congress held at Liverpool, (1869) pp. 358, 359;—Dr. Hume's State and Prospects of the Church in Liverpool, pp. 23, 30.

of Education in despair; and though we cannot avoid regretting this, it is not easy to blame them. Why should they be expected to perform,—not only without recompense, but often at a great sacrifice of time, health, and perhaps money,—an extra task in which the whole community are deeply interested?

13. *An Education Rate.*—How is this evil to be remedied? It might be remedied (1) by a School Aid Society, which would raise funds from the town at large for the benefit mainly of its poorer portions; ignoring, to a large extent, in the matter of education, the conventional or legal limits of Parishes and Ecclesiastical districts. We have a similar society in town, known as the "Church Aid Society," founded in 1859, and it has done a great deal of good,—indeed, it has almost prevented the closing of some of our poorer churches. But I have long despaired of ever seeing a School Aid Society, even for the Established Church. The Clergy in the more favoured parts of the town have little or no sympathy with their brethren who bear the heaviest load; and, while the poor live and die often in brutish ignorance, strange stories are told of lavish expenditure where the real poor are unknown, and "sailing close to the wind," (or being "inexact" in expression), when replying to the questions of the Committee of Council.* (2) The other remedy is an *Education Rate;* and this, in the modified form stated in this paper, I heartily recommend. I would not have this rate as a *substitute* for the present means of support, which are good so far as they go, but as a *supplement* to them. As the people connected with the Irish Poor Law system say, it should be a "rate in aid." We have a small but inadequate "rate in aid" at the present moment. The Church of England School Society votes to sixteen of the poorest Church schools in the town, sums varying from £5 to £20 per annum; and in 1869 these grants amounted to £205 in

* "State and Prospects of the Church in Liverpool," pp. 22, 23, *note.*

all. This is a step in the right direction, and shows what ought to be done. There are advantages connected with *local* taxation, as people are able to see the appropriation of their money and have a voice in its control; and again, there are advantages in *imperial* taxation, as some districts might give a lukewarm support to schools, just as some towns of considerable size and pretensions, have refused to found public libraries.

14. *A Supplement only required.*—Admitting then, what it appears to me impossible to deny, that an Education rate is not only desirable but necessary, for the two purposes of (1) equalising the burden on rich and poor localities, and (2) supplying the wants of those who are "in the lowest deep "a lower deep," the question arises, what is to be gained by going beyond this? Why should we abolish a system which works well so far as it goes? Why give back to willing subscribers, intelligent parents, and the consolidated fund, sums which are ungrudgingly paid; and wring from the community, by taxation, a sum much larger than is actually necessary? Agreeing as I do in the principle of Compulsory Education, and also in that of Local Rates, I fear that some indiscreet advocates of both would push them to extremes which would end in disaster. A rate of a penny in the pound, in the Borough of Liverpool, is equal to about £8000: and a rate of 3d. would amply suffice (1) to subsidise handsomely all the poorer schools of the town, (2) to pay for visitors who should see that every child attended school, and (3) to educate those who are themselves too poor. I should retain, of course, the principle of the existing Education Aid Society,—the parents selecting the school, and thus using up all available accommodation. But, if our present system be swept away to make room for an untried novelty, I venture to predict that a rate of 6d. in the pound will barely suffice, and taxation has already reached such a pitch in

Liverpool, that this could not, and I fear would not, be endured.

15. *Social Difficulties to be avoided.*—Thus, the Educational revolution which is desired by many, is complicated with needless difficulties of a pecuniary and religious nature. But these are not all, there is a possibility of social difficulties. At present the children of our towns are classified by their parents according to grade and creed; but if a system of unyielding uniformity be adopted, large numbers of intelligent working-men, who preserve their self-respect, will be virtually pauperised. It is one thing to accept Government aid, or the bounty of voluntary subscribers; it is quite another thing to be reduced to the dead level of the destitute vagrant, unless a suitable private school can be found in the neighbourhood. If special schools, in various low neighbourhoods, be not prepared, "respectable" children, in the best sense of the term, may have to associate with those of the tramp, the pauper, and the felon—uncleanly in person, in habits, in thought, and in language. It is not unlikely that some of these difficulties might be obviated, but it is well to contemplate their possibility.

16. *Religious Education compatible with Local Rates.*—With a certain class of Educational Reformers, the absence of religious instruction is always regarded as a necessary accompaniment of local rates; but I confess I cannot see the connexion. About the year 1850, a system of Education for Lancashire was proposed, the necessary funds to be raised by a rate, and the administration of them to be in the hands of a Committee representing the various religious denominations of the Union or District. Religion as such was to be abolished, but religious prejudices, distinctions, and antagonisms were to be retained! Also, there might have been three-fourths of the people of one creed—say Roman Catholics, Wesleyans, or members of the Established Church—yet the

representative of that creed might have found himself face to face in the Committee with the representatives of five or six others, who could out-vote him at any moment, though jointly representing only one-fourth of the population! Happily, the system made very little progress beyond the mere suggestion. But it is one thing to say that the Education Committee in a given locality *must* be of certain religious denominations, and it is quite another to say that they *may* be of any. In the former case, while ignoring religion, we insist on sectarianism as a qualification; in the latter, while ignoring sect, we may or may not promote religion.

17. *Example of Liverpool.*—Liverpool is a case in point: and affords a conclusive reply to those who say that the support of education by rates is inseparably connected with a mere secular system. The Town Council of the Borough are elected without reference to their religious belief, and at this moment they probably consist of gentlemen professing at least six different creeds. Now there are two large Schools, one at the North and the other at the South end of the town, for the education of the poor, both of which are supported at an annual cost of about £3000, out of the ordinary income of the Town Council; and they are managed by a Committee, chosen like the other Committees, out of the whole body. In 1835, when the Municipal Reform Act came into operation, a large number of the new Councillors elected were the advocates of secular education merely, and this fact soon told upon the Schools, as the system was assimilated in a great measure to the Irish National System, and the use of the Scriptures was prohibited.* This excited such a commotion in the town, nearly one-third of the population of which consists of Roman Catholics, that in six years the innovating political party were vanquished; the Scriptures were soon

* Some say that this never was the case; but certainly such was the public impression, and was the basis of action on the part of both the opposing parties.

after restored to the Schools; and these are now conducted as ordinary Church Schools,* though several members of the Committee of management, including the Chairman, are Nonconformists. The Roman Catholics, for whose advantage the former change was alleged to have been made, soon erected several excellent sets of Schools for themselves, in general in those same parts of the town. I may be allowed to repeat, therefore, that there is no necessary connexion between the support of education by local rates and the exclusion of religious teaching from the Schools. And if the Town Council of Liverpool would only increase the Corporation Schools from two say to eight, ten or twelve, making some of them special in character,—like ordinary Ragged Schools, and for the exclusive use of the "gutter children;"—we should have very little left to wish for. Every town has something of a special character, and the principle might not act so well in other places as in Liverpool, though occasionally under more favourable circumstances;—but if municipal authorities were empowered to levy rates and to support education and manage it, I have no doubt that in nine cases out of ten Religious instruction would be preserved,—but side by side of course, with a stringent Conscience clause.

18. *Compulsion—how?*—After all, how shall we "compel "them to come in?" What is the form of compulsion, if all these points were satisfactorily settled? Is it to be direct or indirect? On the parent or on the child? By fine, imprisonment, or physical infliction? I will not waste time by attempting to reply to these inquiries; but will merely remark that no practical difficulty has been found in other countries, and why should it exist here? I am persuaded that if the

* The Schools are opened and closed with prayer: the Scriptures are read: a Sunday School is conducted in each by the teachers: and the Town Council pay £20 per annum to a neighbouring Clergyman for seats in his Church to accommodate the Sunday School children of the North School. Those connected with the South School attend one of the Corporation Churches.

pecuniary difficulty were got over, a little moral persuasion, on the occasion of visits from the Teachers, the Scripture Reader, the Clergy and other ministers of religion, would go far to accomplish all that remained. But some people, from whom better might be expected, are always seeing lions in the path, and inventing reasons for not doing what is right and necessary. It is true that a few idlers and outlaws might still remain in the streets, till frightened by seeing the truncheon of the Education Beadle; but even these would at length surrender at discretion.

19. *What is Religious Education?*—But what, after all, is Religious Education? For it is to be feared that many speak of it without attaching to the term very definite ideas. Does it mean repeating the mere words of the Catechism, without attaching to them any ideas? Or is it, as persons say who caricature the instruction, the repetition of sounds approximate to the words, but from which no sense can be extracted? Or is it the mere reading of a portion of the Scriptures? Or the opening and closing of the school with prayer? It is certain that each of these, even the very lowest, is called by the name; but it is equally certain that even the highest is not entitled to the name, if the exercise be gone through as a mere mechanical form. What is of more importance, and is essential in every case, is that a religious tone and spirit should pervade the school; and this depends less upon the regular performance of what is required by the Rules than upon attendant circumstances. A godly master or mistress impresses the young and influences them for good when no words are spoken; and consistency of character and daily conduct are facts that are readily noticed by the young, in either their observance or violation. I have often observed that when the residence of the clergyman is near the schools, there is in general a better religious tone, for he visits with greater frequency and facility, and can drop in more unexpectedly. It appears to me that some of these points are

habitually over-looked, and that no amount of mere intellectual instruction in the Catechism or Scriptures necessarily reaches the higher standard of *religious* education. It is hard to convince a teacher that intellectual acquirements on Biblical subjects do not necessarily constitute religion. The same error, which is common north of the Tweed, clings to many of our people in England—make a man a *critic* and call him a *christian*. In saying this, I do not mean that religious instruction should be abolished, but that it should be made a reality: yet this can never be the case where even the Commandments are prohibited, or where a quotation from the Sermon on the Mount constitutes a violation of the rules of the School.

20. *Suggestion from Manchester.*—Some of the advocates of the Manchester system are in favour of a sort of middle course;—viz., that the Government Inspector should cease to examine on religious subjects, but that he should require from the Clergyman a written assurance that religious knowledge was fairly imparted. In this way religious education would remain in the schools, though the Government would have nothing to do with it officially. An arrangement of this kind would certainly meet some of the difficulties of the present time; but there would be a danger that the certificate would degenerate into a mere form, as is too frequently the case with the assurance (1) that the Pupil Teachers have been duly instructed, or (2) that the Registers have been examined, and (3) the accuracy of the summaries tested. How seldom some of these points are certified from actual knowledge, is well known to many.

21. *Uses of Diocesan Inspection.*—The knowledge of this danger might bring more than an adequate remedy. It would almost certainly lead to regular Diocesan Inspection in Church Schools, not as a *substitute* for the Government inspection but as *supplementary* to it. In his Primary Charge,* the Bishop of

* Delivered October 1868;—see p. 21.

Chester stated that when he was a parish minister he had found the two to work well together, the inspections occurring at six months' distance from each other. My own decided impression is that on *intellectual* grounds also, such an arrangement would be most useful to the schools. There are several points that teachers have a tendency to overlook, and which this double inspection would tend to keep prominently before them. For example (1) it is hard to convince any one who can shew four or five favourable reports of former years, that these are not an excuse, but on the contrary increase the culpability, if the duties are neglected *to-day*. (2) There are hundreds who will not be convinced that bodily presence within four walls is not necessarily teaching a school. (3) Though the School may consist of a hundred pupils of all grades, the teacher's principal, and sometimes almost exclusive, attention is given to the twenty or twenty-five who compose the senior classes. And (4) though salary is paid equally for the whole year, few think it necessary to employ their full energies for more than a few weeks immediately preceding the inspection. These remarks apply to female teachers more forcibly than to males; but they are more or less applicable to both, and everywhere.—There is a further set of errors, which, though not introduced by the Revised Code, have increased greatly since it was adopted. It enacts that the three subjects in which school children shall be examined are Reading, Writing, and Arithmetic; and the consequence has been, not only that other subjects are ignored or carelessly taught, but that there is a persistent attempt on the part of teachers to jump at the *end*, without patiently availing themselves of the *means*. For example (5) every one knows that it is impossible to teach Arithmetic successfully, or except in mere name to teach it at all, if the Tables be not properly known, and something also of the reasons of the rules. But this implies a frequent drilling in elementary matters, and that is inconvenient or disagreeable: so

the result is that a mechanical mode of solving arithmetical accounts is taught in our schools,—till the wonder is that any beyond a small per centage ever become able to calculate. (6) In like manner it is impossible to Read accurately, and especially it is impossible to write from Dictation, without understanding the structure of words; in short, spelling should be taught not only by the eye, but also, as in the olden time, by the ear. Yet I would almost be correct in saying that in many instances it is not taught at all; that even advanced boys and girls can readily be found who are unable to tell the number of syllables in a word, or to name that on which the accent is; the lazy and injurious system of "look-and-go-on" having become popular with teachers from whom better might be expected. Let a man of education imagine how long it would require for a boy to learn a foreign language, living or dead, if the ordinary rules of Grammar were not taught, or if the pupil were left to find them out for himself. (7) We are getting more and more into the habit of degrading and abusing the faculty of memory by learning words! words! mere words! The child has therefore to perform two distinct processes one of them usually after an interval of years; viz., first to learn certain words, and second to find that they mean a certain thing. A piece either of prose or poetry which is first intelligently understood, or made plain to the judgment, is grasped in one-third of the ordinary time by the Memory, and retained ten times as long as by the usual process. I repeat, therefore, that more frequent inspection of all Schools would be of immense advantage to Education: but as this cannot be expected from the Government, it must be looked for in some other direction. Local Boards might have Inspectors for their own Schools; and for Schools connected with the Church of England, Diocesan Inspection should be systematised and made permanent.

ON THE POLITICAL ECONOMY OF GREAT BRITAIN.

Part I.—Public Indebtedness.

By B. L. Benas, Esq.

(Read February 11th, 1869.)

The science of Political Economy has, within the last generation, attracted a higher degree of attention than for many previous ages. Unlike Poetry, History, or general Literature, in this pursuit the learner has no brilliant flights of imagination, no glowing feats of arms, no beautiful traits of character, to wile away the monotony of mental labour; he has before him nothing but facts and figures. Yet withal it has its points of interest. The just and careful administration of the finances of a country, more than any other cause, developes civilization, and elevates a nation from insignificance to a prominent position in the world's status.

It must strike one, however, very forcibly, that during the last century and a half, nations have been heaping debt upon debt, carrying on wars, making treaties of peace, vainly hoping each would be a durable basis of tranquillity. War has recommenced, after the lapse of very little time; until some governments have actually had to succumb under their enormous indebtedness.

The mode of providing for the wants of State are now nearly identical in every civilized community. Be it the

Czar with his millions of subjects, to whom he is irresponsible, the Constitutional Monarch, who governs hand in hand with his people, or the Republic, that is ruled by its chosen officers—one mode is adopted. Taxes are drawn from the governed, both direct and indirect, sufficient to cover all expenses. When, however, the expenditure is considerably more than the income, in order not to press too heavily upon the people, a loan is contracted, either terminable, or repayable in instalments, principal and interest, in a lapse of years; or interminable, that is, the government only consenting to pay the interest of such loan, the debt itself remaining a consolidated fund, which can be transferred by the original loaner to another, according to the market value per cent. of such security. It is the last of these debts which constitutes the principal feature of transactions in our Stock Exchanges.

The total amount of indebtedness of Great Britain and her colonies amounts, in round numbers, to £944,139,000, of foreign countries to £2,560,000,000. If we average, for England and her colonies, an annual interest of 4 per cent., we have an amount of £37,765,000 to provide, simply to pay off the yearly charge upon us for this borrowed money. If we could think it possible that a philosopher had no knowledge of history, he, glancing at these figures, might suppose that there exists not a village without a school, not a misery that has not been amply relieved, no resource that has not been developed, and that with so much money at command no improvement tending to the development of our kind has been omitted. Yet we are aware that the greater part of the loans contracted by the different governments were either for war, or preparations for war, or for defence from hostile attacks. The real solid advantages of peace and civilization have added but a small proportion of their share to this accumulated debt.

The United States of America have in five years loaned

the sum of £565,000,000, not for peaceful pursuits, but in the old European warlike fashion, though I must confess the object attained was worthy of the expenditure.

No service can be rendered to society by indulging in speculations as to how all this could have been avoided, and we doubt very much how indeed modern society could have been spared this, for the very legislators that have tended most to pile this edifice of debt must, at the conclusion of their projects, have been astounded at the "*Frankenstein*" that they had called into existence. We glance briefly into past history to ascertain why this national indebtedness is but a plant of comparatively modern growth.

We must bear in mind that spoil and captives were the prizes of the ancient victors. The Greek, when he led his phalanx into the stranger's territory, shewed his warriors the luxurious vineyards and smiling fields of the Persian to tempt them to conquer; even far, far back, when the Hebrews were led into Canaan, the land flowing with milk and honey was the reward of a forty years' wandering in the wilderness. The golden shores of Gades in Spain called the Phœnician mariners with alacrity to spirited achievements; and Hannibal, from the Alpine heights, shewed his weary Carthagenians the fields and lovely plains that should amply repay the toil and expense of their enterprise. The great Roman empire spread itself far and wide almost without expense by the tempting territory on all sides ready to the grasp of the military adventurer. The Huns and Goths marched like a cloud over the civilized portions of the earth; and, to leap over centuries, the Normans, attracted by the green meadows and splendid soil of this our country, came over to seize by their prowess what the Saxon could not by force of arms retain. The Norman William without difficulty obtained from his newly-enriched nobles such assistance as he needed for his military projects; his successors, and

more especially John, found a rather prolific source of revenue from his Jewish subjects, when in want of money: a few threats, a little massacre, and not in quite so severe a degree, a tooth or so drawn from these heretical subjects, soon brought these patient people to purchase with their property and gold that temporary security which the law denied them. The same process was carried on, more or less, in all countries on the continent of Europe. When Philip Augustus drove these people from his dominions, after relieving them of their moveables, he, a few years afterwards, had to recall them, one of his lords justly exclaiming, "you have killed "the goose that laid the golden eggs." Yet it must not be thought that these alone had to bear the brunt of spoliation, the Barons did not allow their serfs to pass unscathed. The peasantry of Europe had to pay very dear indeed in life, limb, as well as with their scanty means, for the necessaries of war. Nor did the humble classes alone bear their share of the burden, for the Patrician himself did not shrink from making a goodly show of retainers, and many a Baron impoverished himself by lavish munificence to his followers.

There were, however, numerous agencies at work to entirely alter the means of carrying on warfare. The foremost amongst these was the increase of population and the rise of the mercantile burghers. The Hanse towns, the rich cities of Flanders, had each a voice and an influence in the maintenance of peace or war. There were no more lands and territories left whereby the military adventurer or the soldier of fortune could lure his followers, by the promises of wide estate and ample means. Everything had already been parcelled out in a former generation, and those that gained their soil by the sword, took pains to inure themselves to keep it by the same means.

Another cause, and not the least, was the invention of gunpowder. This subtle agent, secretly, silently, as if in

mockery of religion, ushered into the world from a monkish cell, was destined to be a greater innovator into the then system of society than the most elaborate scheme of the legislator's brain. The mailed knight was once a match for a score of unprotected peasantry, and a charge of men encased in armour was a striking argument to the revolutionary rabble or misguided patriot. This was all changed; and the shot from a well-directed musket, a thousand feet distant, made the chevalier feel that strength and armour must give way to the new tactics. Feudalism gradually declined in England. It waned under Edward, the hero of Cressy and Poictiers; still sank under the Lancastrian Henry of Agincourt, but being once more galvanized into life, like the last flickering of a candle, in the wars of the Roses, is seen devastating the country, injuring commerce, but centering the power in the hands of the Yorkist Edward. With Guy Earl of Warwick, called "The Kingmaker," was closed a volume of events that modern society forbids us to believe will ever be re-opened. With the fall of Richard and the union of the rival families in the person of Henry VII, commences an entirely new era in the political, social, and financial records of England; and history has hardly yet given credit to the indomitable energy, unflinching perseverance, and rigid economy, bordering almost upon parsimony, which were the principal characteristics of this sovereign. He had to combat with internal dissensions and the intrigues of open and secret foes. Notwithstanding this, commerce revived under his sway, new lands were discovered, and by the example of the King, money was accumulated in all parts of the country, so that it is really surprising, if we consider the havoc which the innumerable conflicts between rival dynasties had perpetrated upon the kingdom, that in one reign the country should have been raised to that comparative state of prosperity which England really enjoyed at the death of Henry VII. The

amount of ready cash left by this monarch was £1,800,000. If we consider that the lb. troy of silver was worth at that time but £1 17s. 6d., and the value of commodities being so much less than now, the amount for that period is something colossal.

The extravagance of his son, Henry VIII, speedily dissipated the hardly-accumulated riches of the father, and the spoliation of the pious bequests of our Catholic forefathers went to replenish the exhausted exchequer of this monarch. Among the means employed by the successors of the Tudor dynasty to provide for the expenditures beyond the balance of taxation, was recourse to temporary loans from the goldsmiths of London, who were the first bankers, as well as from the Flemish burghers. Elizabeth managed her finances so admirably that not only did she not overtax her people, but by means of economy, she paid all the debts which she found on the crown with their full interest, though some of these debts had been contracted during the reign of her father. Some loans which she had exacted at the commencement of her reign were repaid by her, a practice in that age somewhat unusual; and she had established her credit upon such a footing that no Sovereign could more readily command any sum which the public exigencies might at any time require. In former times, when English princes had recourse for voluntary loans to the city of Antwerp, they had to pay 10, 12, and even 15 per cent. interest, besides making the city of London join in the security. Elizabeth was enabled, through Gresham, to obtain from that city a loan of £200,000 at eight per cent. interest per annum, and in later parts of her reign she was enabled to obtain loans in England, the credit of the government having so much improved by the careful management of the Sovereign. Her successor, James, more through his foolish liberality than actual extravagance, caused himself soon to fall into financial difficulties.

A very happy French couplet well describes the contrast between this and the former reign; they said abroad—

Tandis qu' Elizabeth fut Roy
L'Anglois fut d'Espagne l'effroy,
Maintenant devise et caquette
Regi par la Reine Jacquette.

which freely translated runs thus—

Whilst Elizabeth was King
England was to Spain a fear;
But with Jacquette as Queen
They only talk and prattle there.

The amount which this Sovereign raised during his reign for extraordinary disbursements was £2,200,000, and this includes the questionable income derived by the sale of the title of Baronet. Interest was at 10 per cent. per annum. In 1624 it was reduced to 8 per cent. The customs produced in 1604 £127,000, at the latter end of James's reign they yielded £190,000. According to Raleigh, in the year 1583, at a general review taken of all men capable of bearing arms, the number was found to be 1,172,000; it is not possible, however, to warrant the exactness of this computation. The pay of a private was 8d. a day, of a lieutenant 2s., of an ensign 1s. 6d. The privates were at that time drawn from a better rank than at present, and approached nearer to that of the officers.

The period of English history known as the civil war of Charles and the Parliament would in itself be sufficiently expansive to form an interesting study to the political economist, and it would take too much of our space to glance at the various means for raising money during this troubled time.

The customs yielded, it is said, before the civil wars a sum of £500,000, ten times the amount raised in the reign of Elizabeth; but this is perhaps exaggerated.

The Post-house in 1653 was farmed at £10,000 a-year,

which was at that time thought a considerable sum for the three kingdoms. Interest in 1650 was reduced to 6 per cent. per annum. From 1619 to 1638 there had been coined £6,942,000; from 1638 to 1657 £7,733,000. Dr. Davenant tells us, from the registers of the mint, that between 1558 and 1659 there had been coined £19,332,476 in gold and silver. We have specially forborne to touch upon the political bearings of this memorable epoch; but whatever were the faults of Cromwell, nothing of the national property was used by the Protector for private ends; on the contrary, the finances were strictly and conscientiously devoted to the requirements of the state. In 1652 the Commonwealth maintained a standing army of 50,000 men, its pay amounting to £1,047,715.

During the protectorship of Richard Cromwell the whole public revenue was £1,868,717, the expenses £2,201,040. An additional revenue was demanded from Parliament to meet this deficit.

The reign of Charles II, marked as it was by lasciviousness and boundless extravagance, presents a chaos of confusion. To raise money to supply his luxurious court he had not only to marry a wife he did not love, for the sake of her dowry, but had to stoop to an expedient hateful to English feeling, that of accepting a pension from a foreign monarch, and selling territory that had been won by the valour of his ancestors.

The conduct of his brother and successor, James II, having been odious to the great majority of his subjects, he abdicated the throne. The Dutch William and his wife Mary, the daughter of the previous Sovereign, became, by what is termed the Revolution, though that is hardly consistent with our present ideas of that term, the occupants of the throne of these realms.

Before proceeding further we must take a view of the affairs of Europe, in order to comprehend the financial bearings of this reign, which may indeed be termed the source of

modern monetary operations. Spain, which at one time was dominant in Europe, had sunk by internal dissensions and mismanagement into a secondary sphere;—Germany, split as it was into numerous states, each having a diverse policy, counted for nothing in the weight of European influence. The same may be said of Italy. Russia was only just emerging from obscurity. France alone was the great power and arbitrator of events. This homogeneous State was then governed by Louis Quatorze, the very incarnation of refined despotism, where the grossest misgovernment was covered with a thin veneer of luxury and education. The low rumblings of a storm, destined to break out in another reign, were drowned by conquests, and war upon other and neighbouring governments; and Louis, carrying out his proverbial "*L'etat "c'est moi,*" was the great cause of the wars in which William III was engaged. Seeing that glory would alone satisfy the desire of his subjects, or rather direct the discontent of the people away from himself, Louis not only annexed valuable provinces to France, but sought to place his relatives upon other European thrones. Whether for good or evil, William of Orange placed the full power of England in the scale against him, and though we achieved victories flattering to our national pride, few tangible benefits were secured. On the contrary, the foundation of a large debt was laid, the interest of which we at the present day have still to raise. In 1688, at the revolution, the debt of the nation was £664,263: the interest upon the same £39,855. The increase during William's reign was £12,102,962 of principal, and of interest £1,175,469.

The war, though closed by the peace of Ryswick in 1697, was re-opened by William's successor, Anne, and the glorious victories of Marlborough caused an increase in our debt, during the reign of this Queen, of £23,408,235, and yearly interest £1,847,811. The former reign was made memorable

by the establishment of the Bank of England, the charter of which is dated July 27th, 1694, as was the reign of Queen Anne by the great distress occasioned through the exploding of the South Sea Company. At the termination of this Queen's reign in 1714, the public debt had increased to about £36,175,460, with an annual interest of £3,063,135. Of the thirteen years that this Sovereign reigned, twelve were years of war. The military and naval expenditure was £58,560,581, which, like that of her predecessor, was entirely for continental engagements, and was terminated by the disgraceful treaty of Utrecht in 1712, when our allies were ignominiously abandoned.

On the accession of the new Sovereign of the House of Hanover, George I, the national debt amounted (as just stated) to £36,175,460, with an annual rate of interest of £3,063,135. Although this was a comparatively quiet reign, at its conclusion the debt amounted to £52,850,797, annual interest £2,739,628. It will be perceived that though the debt had sensibly increased, the annual charge for interest had decreased; this was caused, firstly, by a reduction of interest in 1717, and by a still further reduction in 1727 from 5 per cent. to 4 per cent.

George II, the son and successor of the preceding monarch, inaugurated a series of wars, which commenced in 1739, and were concluded by the peace of Aix-la-Chapelle in 1748. Dr. Colquhoun calculates the total expense of these conflicts at £46,418,680, resulting in simply a *status quo ante bellum*, though we enjoyed the rather expensive glory of placing Maria Theresa upon the German throne, in opposition to the King of Prussia. In the interval of peace till the commencement of war in 1755, a slight reduction took place in the debt, and the annual interest was reduced from 4 per cent. to 3 per cent. per annum. There were, however, many expenses in the later years, necessitated by the invasion of the

young Pretender, who met with a signal defeat on the field of Culloden; while the internal fermentation carried on by the political differences and rival pretensions of dynasties caused the resources of the kingdom to be retarded for a while, though not for a very long period. We then find this country again engaged in a war diametrically opposed to the principles previously announced:—at its beginning the public debt amounted to £74,575,025, with an annual charge of £2,753,566. Then followed the celebrated seven years' war, in 1756. The policy of England was, a few years before, to humble the King of Prussia. In this instance, however, when Frederick of Prussia violently seized one of the fairest of the Austrian provinces, and thereby brought on a colossal war between himself and Austria, France, and Russia,—Great Britain assisted him with subsidies and men, costing the nation £111,271,966. Again, for an enterprise contrary to the direct weal of the nation, our debt increased during that period to £126,794,937, with an interest of £4,747,849. From a Prussian point of view nothing could be more glorious than the actions of the great Frederick. He found Prussia small and insignificant, and left her enlarged and powerful, and with a leading influence in the destinies of Europe; but England only reaped second-hand glory at best, and even this is denied us by some historians.

The eventful reign of George III may be divided into three periods:—the American war, the French revolutionary war, and the Napoleonic wars which terminated in 1815. We will not enter into the political aspects of the American war of independence, nor will we indulge in the idea that a timely conciliation would have transformed what is now a rival nation into a kindred, prosperous, and friendly empire. The majority of Englishmen now admit the rights of the American colonies, but this obstinacy on the part of a former generation caused an increase of the debt of £104,681,218,

and interest of £4,362,066, the total debt, at the conclusion of this fratricidal contest, being £231,843,631, with an interest of £9,065,585.—The second war against the French republic in 1793 was also impolitic. We cannot wade into the historical circumstances of this gigantic upheaving of society, which was brought about by the total ignoring of right and justice. The excesses and enormities committed by the originators of this revolution have blunted the good of the principles enunciated by that coalition against mediæval absurdities; and although the actors in that scene of crime and bloodshed are unworthy of the sympathy of humanity, they still were as the foul substance put into the earth, to bring forth a goodly harvest. Our nine years' war against the French Republic cost us the enormous amount of £289,778,574, increase of interest £10,557,313; and our total debt at the peace of Amiens in 1802 was £537,653,008, with an interest of £20,268,551.—Again, the Napoleonic wars, until the peace of 1815 (thirteen years of combat) cost us £323,386,041, with interest at £12,377,067, our total debt at the peace of Paris, in September, 1815, being the sum of £861,039,049, and the interest £32,645,618.

Having now arrived at the extreme point of our national indebtedness, we may leave figures for a while to ponder over the causes and results of our financial operations. A venerable statesman, whom England delighted to honour, the late Lord Brougham, said that our enormous obligation is a bail tendered by us to keep the peace with all the world. What a pity the bail is so great and that the idea had not entered the mind of our legislators a little earlier.

We can readily lay the accumulations of debt on the following wars:—

Firstly, with Louis XIV. We ask, what was achieved for the material prosperity of the kingdom by opposing the ambition of this monarch? Secondly, by attempting to coerce

the rebellious American colonies? Thirdly, by opposing the revolutionary ardour of the madmen of 1792? And, lastly, by the fruitless combats against the Napoleonic dynasty? These events alone caused the major part of our debt, and yet many historians assert that it was the ambition of France alone that forced us to a policy of war. It would be fruitless to argue that such is not the fact, seeing that we now tacitly acknowledge the advantage of a French alliance, which would have inspired our sires with horror. Again, with regard to the United States, how gladly would England proffer the hand of friendship to that kindred nation, whose power and capacity have so gigantically increased for good or evil. Our greatest fault has been and is still—although there are so very many who would flatly contradict this assertion—the want of thoroughness in our foreign policy; it is that, and that alone, which clogs the industrial and social resources of these realms. We have ever been coquetting with principles instead of carrying out our object, until it has been attained by other means. So far from learning by the past, we, in the Crimean war, only touched upon an idea which we eventually—though it is alleged in consequence of French allies—shrank from carrying into effect. Indeed the colossal empire of the North might at any moment recommence her aggressions, or, perhaps more properly, obey her natural ambition; and it is not at all improbable that, in such an event, we should determine to let things take their course, as we did with Denmark and Prussia. Now, during the Crimean war, thirty millions were spent in simply enunciating a theory which, at second thoughts, we declined to prosecute any further. It behoves us to draw a moral from this. We may ask—Do we or do we not intend so to interfere in foreign politics that our action may possibly be construed into an indirect menace against our empire and its possessions? Modern Statesmen have adopted the theory of non-interven-

tion; be it so. It is none of our desire to prove whether this be to our advantage or not; but taking the principle as we find it, we need only seek to defend ourselves from foreign invasion, which a nation counting a population of 30,000,000 has certainly little fear of effecting. Let us now examine the budget of expenditure, taking that of 1865, as a fair average of a peaceful year. We have

1	Interest of Public Debt..	£26,369,398
2	Army	14,382,672
3	Navy	10,898,253
4	Fortifications	620,000
5	Collection of the Revenue	4,729,189
6	Post-office Packet Service	870,000
7	Salaries and Expenses of Public Departments..	1,713,543
8	Diplomatic and Consular Service and Colonial..	721,241
9	Law and Justice	3,390,096
10	Civil List	406,313
11	Annuities and Pensions	313,750
12	Superannuations	359,479
13	Education, Science and Art	1,222,744
14	Public Works and Buildings	631,906
15	Interest on Loans, Secret Service, &c.	181,527
16	Civil Contingencies	58,000
17	Scheldt lost redemption	174,597
18	Miscellaneous	161,540
	Total	£67,204,248

Here we have about fifty millions expended upon what we do not enjoy, leaving about seventeen millions from which we have really some tangible benefits. It may be argued, Do we not require our army and navy to protect us from invasion? and is that not something worth having? True. Now examine the great military nations, *par excellence*, of the Continent.

France, in 1865, expended £14,000,000 for her army, the same almost as our own. For her navy £6,000,000.

Austria, in 1864, for her army £9,000,000. For her navy about £1,000,000.

Prussia, in 1864, for her army £4,200,000. For her navy £500,000.

Russia, in 1864, for her army from 15 to 16 millions. For her navy £3,000,000.

It must be borne in mind that any of these powers would find little or no difficulty in placing, upon the shortest notice, 200,000 regular soldiers of the line in arms against any comer, which we are well aware we could not do, if we exclude the militia or volunteers. We deduce from this, that for an army infinitely less mobile than the French, immeasurably less both in numbers and elasticity than that of either Austria, Russia or Prussia, we pay as much as the first, half as much again as the second, almost as much as the colossal legions of Russia, and more than three times as much as that splendid army of Prussia, which was enabled to crush Austria, awe imperial France, and check Russia. We will lay the flattering unction to our soul that not a penny of the expenditure of our navy is misapplied, and that not one iota of the amount is lost through mismanagement, and we have still the awful fact staring us in the face, that for a military too insignificant in numbers for aggressive purposes, we expend as much as the most despotic sovereigns who employ their legions to further any ambitious enterprise. We will not forget that our army is not an army of conscripts, and that we pay them well; but soldiers of other nations must also be fed, and the comparison of food is not immensely to the advantage of the British soldier, though perhaps the quality if not the quantity of food given to our soldiers is a little superior. If it were only possible to keep the peace with all the world for ten years, to reduce our military and naval expenditure by one-half, we should have our debt decreased by £120,000,000, and our annual taxation by nearly £4,000,000.* It might be urged that to reduce our armaments would be to invite attack, yet one would fain believe that our national strength lies less in expensive mili-

* This paper was written in 1868, and since that period very many of the suggestions of the author have been practically carried out. The Budget of the Chancellor of the Exchequer in 1870 shews a reduction in taxation of above four millions sterling.

tary and naval machinery than in the inert patriotism which foreign nations well know, and the latent force in these realms which is well able to defeat aggression, come from whatever quarter it may.

If we compare the Educational grants of our government with those of foreign nations we do not stand so much in the rear as is generally supposed, though it is said that we do not receive an equivalent for the amount expended. As we have seen before, in the budget for 1865, £1,200,000 was voted in England for education, science and art; France devoted for these purposes about £800,000; Prussia expends £600,000 and Russia about a million. Everywhere we may observe that armaments absorb the great proportion of the revenues.

It may not be inopportune to examine the means adopted in the United States to facilitate the mental cultivation of the masses, and it is palpable to all economists that many social as well as political problems are finding their test and solution in that great new community, in a manner which it would be unwise and injudicious to attempt to introduce in a country like our own, that must perforce pay some deference to the traditions of many centuries. Examining the census volume of the United States for 1860, we find that the number of inhabitants of the Anglo-American colonies in

1700	was	262,000	1790	was	3,929,827
1749-50	„	1,000,000	1860	„	31,443,321
1775	„	2,389,300			

This unparalleled increase of population, being from 1790 to 1860 about 700 per cent., would evidently have promoted anarchy and confusion but for the corresponding increase of popular intelligence. Thus, while the first newspaper ever published in the Anglo-American colonies, called the *Boston Newsletter*, was issued in 1704, in 1775 there were already thirty-seven newspapers, and forty at the separation of the colonies from the mother country. In 1850, 2,526 daily and weekly journals were issued, and in 1860 there existed 4,051

newspapers, with a circulation of 928 millions. We can observe from these statistics that the march of intellect has more than kept pace with the increase of population.

The number of schools in the Union in 1860, including Colleges, Universities and every seat of learning, except those of Maryland and the District of Columbia, was 113,000, having 148,742 teachers and nearly 4½ millions of pupils, supported by public taxation to the amount of £4,274,956, besides income from endowments.

Now we in this country, with a population densely covering the soil and consequently much easier to educate, are much worse off. The vote in Parliament proposed for public education in Great Britain, for the year ending March, 1869, was £842,554, an advance of £136,689 over the vote for the fiscal year just expired. The calculation, based upon the number of scholars in average attendance in schools inspected during the last school year in England, with the per centage added for the ordinary increase, gives 985,200 as the estimated average attendance in 1868, (less than one-fourth of the attendance in the United States schools.) But an addition of 45,000 is made for half-timers under the Workshops Act, and of 16,000 for scholars in congregational and other schools newly admitted to aid, raising the estimated number of day scholars to 1,046,200. The rate of grant is estimated to be raised, under the minute of February, 1867, to 9s. 10½d. per scholar. Hence the education vote of this session will make provision for 1,046,200 day scholars at 9s. 10½d. each, in elementary schools fulfilling the article requiring certificated teachers; as the amount reaches £516,561 instead of the £427,345 of last session's vote, and there are 56,340 evening scholars at 6s. 6d., requiring £18,310. It is calculated that if, on an annual average, a million scholars be attending aided schools, there remain 500,000 attending unaided ones of the same class, and that 100,000 of them are in schools with an average attendance not exceeding 65.

Briefly, the education vote for Great Britain, to be proposed this session, stands thus:—

Office in London	£29,482
Inspection	64,103
Normal Schools	74,250
Building Grants	45,000
Annual Grants, England and Wales	549,639
Grants to Teachers in Scotland	79,500
Unexpired pensions	580
Total	£842,554

We may from these figures conclude that the education of the masses is by no means fostered by ourselves as by our cousins on the other side of the Atlantic. It must, of course, be taken into account that an immense amount of tuition is imparted to the young privately in this country, which, in these statistics, receives no cognisance; but this applies equally to the United States, so that we can nearly be content to base our conclusions upon the figures as before mentioned.*

An interesting calculation has been made respecting the proportion of instructed children, compared with those uninstructed, in different civilized countries; and the result has been found as follows:—

TWENTY YEARS AGO.

United States	1	to every	4	of population.
Saxony	1	„	5½	„
Prussia	1	„	6	„
Denmark	1	„	7	„
Norway	1	„	7	„
Scotland	1	„	8	„
Switzerland	1	„	9	„
Austria	1	„	10	„
Belgium	1	„	10	„
England	1	„	11	„
Ireland	1	„	13	„
France	1	„	13½	„

* Since this paper was written a new Government has come into office, and an Education bill has been brought forward by Mr. Forster, which, although having many good points, fails to give unmixed satisfaction. In a future paper the author proposes to go into this subject in detail.

But ten years ago the Education Commission which sat in England showed that we had made immense improvements; for whilst other countries were almost stationary, we ranked next to Prussia, and stood as under:—

TEN YEARS AGO.

In Prussia	1	to every	6¼
„ England	1	„	7½
„ Holland	1	„	8
„ France	1	„	9

In the United States the proportion was still about the same on the average as twenty years since, though varying in the different States from 1 to 3 in Maine, 1 to 6 in Illinois, and 1 to 15 in Oregon, this latter State being very scantily populated, and only settled by off-pourings of Europe and the refuse of the United States; and even this State is rapidly improving by the erection of schools and places of worship.

Dr. Larroque of Paris, author of a Prize Essay on the Standing Armaments of Europe has just published the following statement, from carefully prepared statistics, of the enormous outlay for military preparations. We may say with Ovid—

"Illa est agricolæ messis iniqua suo."

Annual amount of the Naval and Military Budgets of Europe	£119,392,665
Loss of labour involved by the withdrawal of so many men from productive industry	132,174,892
Interest of Capital invested in Naval and Military establishments	30,440,000
	£282,007,557

This makes a total of more than 280 millions taken every year from the people for the maintenance of military establishments.

Mr. Henry Richard, referring to these statistics in an Essay recently published by the Social Science Association, remarks as follows—"The first effect of this is that the finances of

"nearly all European States are in a condition of normal "embarrassment.

"In Russia there has been an excess of expenditure over "income ever since 1832—in 1865 it amounted to nearly "£7,000,000. In Austria there has not been a year from "1789 to the present in which the revenue of the State has "come up to the expenditure. The accumulated deficits from "1851 to 1866 exceed £130,000,000. In France the public "debt has increased in thirteen years, from 1851 to 1864, "from 213 millions to 492 millions, and the whole of its "debt now amounts to 539 millions.

"The new kingdom of Italy is reeling beneath the burden "of its vast expenditure to such a degree that its best friends "have grave apprehensions whether it can stand. Official "returns state the annual deficits from 1860 to 1866 to "amount to 114 millions sterling. Many of the smaller "States of Europe, such as Turkey, Spain, and Portugal, are "in a similar condition. It is a melancholy reflection that, "admirable as are the enterprise, invention, skill, and laborious "industry of the toiling millions of producing classes in "Europe, they are deprived of so large a proportion of the "fruits of their labours by the perpetual drain made upon "them to sustain this armed rivalry kept up by their rulers."

Mr. Legoyt, the Secretary of the Statistical Society of Paris, writes—"Let us for a moment suppose that by an "understanding with the Great Powers a disarming in the "proportion of one half was effected, immediately two millions "of men from twenty to thirty-five, constituting the flower "of the population of that age, are restored to labours of "peace, and at once an annual saving of £64,000,000 is "effected on the totality of European budgets."

The same author shews further, that this reduction of only one half of the armies would be sufficient to complete the entire system of railways throughout every state of Europe,

and for the establishment of a primary school in every parish and commune; and on the other hand, it would enable all the national debts of Europe to be paid off in less than forty years, thus occasioning an immense alleviation of popular burdens, and an incalculable stimulus to business.

The consequence of war, although for the moment giving an unhealthy stimulus to trade, is most hurtful to true progress; it creates a population of paupers, which is the greatest bane of modern society in England. This subject is so comprehensive that we have thought fit to devote a separate section to it, which in a future session will be laid before you. It must not be thought that the writer has utopian ideas of a universal brotherhood; and that, were the plans of a certain society carried out, wars would be a thing of the past. Unfortunately human nature must fight out first that which in the end is negociated by diplomatists. The aim of this paper is to deprecate the use of large standing armies *in times of peace.* They can only serve in periods of tranquillity as a means of effecting the purposes of despotism.

A celebrated philosopher has remarked that soldiers in times of peace are like chimneys in the summer; but the simile ends there, because the prime cost of building the chimney once effected, there is no extra expenditure when no fuel is used. How different with military forces.

The mind of the people is slowly awakening to the truth that defence from outward attack is the duty of every citizen; but it is also equally awakening to the fact, that rulers' quarrels are not peoples' quarrels; and we may hope for the time when dynastic warfare shall cease for ever.

The lesson we can draw from the study of political economy, and especially that which has regard to public indebtedness, is, that the due payment of those debts already incurred, and the true and legitimate honour of nations is to be best effected not by war and bloodshed, but by peace and its

consequent prosperity. Would that the time were nigh when we might say in the words, though not in the sense, of the immortal bard—

" Farewell the plumed troops, and the big wars,
" That make ambition virtue! O, Farewell!
" Farewell the neighing steed and the shrill trump,
" The spirit-stirring drum, the ear-piercing fife,
" The royal banner; and all quality,
" Pride, pomp, and circumstance of glorious war!
" And O you mortal engines, whose rude throats
" Th' immortal Jove's dread clamours counterfeit,
" Farewell! Othello's occupation's gone!"

ON THE
POLITICAL ECONOMY OF GREAT BRITAIN.

Part II.—The Poor Laws.

By B. L. Benas, Esq.

(Read December 30th, 1869.)

"The poor shall never cease out of the land." Four thousand years of practical experience have confirmed this truth. We have never heard of a period of history when the poor existed not. In the land flowing with milk and honey, whose soil is rendered sacred by the glorious traditions of old; in the classic land, enriched by bard, soulptor, and philosopher; in that gigantic military realm, whose eagles waved triumphantly from shore to shore—everywhere there were poor to be found. And when the military adventurers of Spain invaded golden lands and shared a princely spoil, too soon were needy ones to be found even amongst these. We may take it for granted, then, that poverty exists in every community, especially of civilized men, and it is not only a duty enjoined by religion, but an undeniable law of expediency, that those must be assisted who cannot assist themselves.

It is certainly more easy to find fault, and criticise a system that has grown with an artificial state of society, than to prescribe a remedy. It flows less from want of management by those who have the system under control, than from the positive difficulty, under a constitutional government, in coping with that which an enlightened despotism would be able to grasp more firmly. We are too well aware of the advantages which a representative form of government

gives to mankind even to hint that a more arbitrary form would be better able to command the means of ameliorating the condition of our suffering population; but the facts still remain the same, that we have in England a large population unable to earn their sustenance, entirely dependent upon the earnings of those who are able to maintain themselves; and further, that whilst for Imperial purposes we have a comparatively equitable mode of taxation, for the relief of the poor, or rather in those districts where the poor abound, the burden falls upon those that suffer most, while those districts where affluence abounds are spared from the penalty which the others have to pay. This indeed is a glaring evil. It would be equivalent to making those parts of the realm which are most accessible to an invading force, pay a large premium for the defence which their position costs the country, whilst those more happy districts far removed from any danger of invasion, would pay correspondingly less.

We may divide our poor into three classes:—

1. Those that will work, but can obtain no employment.
2. Those that are, from physical causes, (infirmity, or old age,) incapacitated for work.
3. Those that can work, and will not work.

So long as the feudal system existed in England in its entirety, very little was heard of the necessity for poor laws; because the serf was then the virtual property of the owner of the soil, and the landlord generally cared for his vassals. The foreign wars, however, of Edward III introduced a new feature into the social economy of the country. Men were half forced and half tempted by their lords to enlist under their banners; and many, in consideration of their valour upon the battle field, were promised independence. The wars over, these men were unfit to work, unwilling to till the ground; and, habituated to a roving life, they became, in many instances, vagabonds and criminals.

Thus we find in the 12th year of the reign of Richard II, in 1388, a law enacted by the Parliament—"To devise some "means of supporting 'impotent' beggars and others having "no means of livelihood." This act may be termed the foundation-stone of our poor-law system.

The act further states—"That a convenient sum shall be "paid and distributed yearly out of the fruits and profits of "the several Churches, by those who shall have the said "Churches in proper use, and by their successors, to the poor "parishioners in aid of their living and sustenance for ever."

Thus indirectly, and in rather a clumsy manner, the poor were relieved by the State. The Church was no doubt allowed to gather supplies for this purpose. In consideration for this permission, the Church spared the State the responsibility of caring for the poor.

That the poor were really contented under this system, the evidence will hardly allow us to believe. We hear of large revolts like those of Wat Tyler and of Jack Cade, but the smaller local riots no doubt were left unrecorded, partly from the deficient means for the communication of news, and more especially from the desire to leave these things in obscurity. But when serfdom had entirely ceased in England, and, above all, when Henry VIII possessed himself of the property of the monasteries throughout the land, the government, which had hitherto interposed the Church between itself and the needy, was now brought face to face with its destitute subjects. If the spoils of the monasteries had been devoted to the maintenance, under State control, of the poor for whom indeed the original bequests to the Church were made, instead of being shared amongst those who assisted to plunder the Church, the change of title to the property might perhaps have left little cause for regret; but as it was, the poor lost the support they had hitherto depended upon, without receiving an adequate substitute; and a series of legislative enact-

ments was framed by Henry VIII's parliament, though without in any way checking the increase of pauperism. One of these, passed in the 22nd year of this sovereign's reign, cap. 12, was "to grant licences to such poor people as they might consider "most in need, to beg alms within certain districts;" and another, that "sturdy vagabonds and valliant beggars may "be kept to continual labor;" with the provision that "a sturdy "beggar is to be whipped the first time, his right ear cropped "the second, and if he again offend to be sent to the next gaol "till the quarter sessions, there to be indicted for wandering, "loitering and idleness; and if convicted shall suffer execu- "tion as a felon and an enemy to the commonwealth."

In the reign of Edward VI, 3, 4, cap. 16, we find it enacted—"That in Whitsun week, the Minister or Church- "wardens shall appoint collectors to gently ask every man "and woman what they, of their charity, will give towards the "relief of the poor, and if any obstinately or frowardly "refuse to give, the bishop is to send for him to induce and "persuade him by charitable ways and means."

From the various causes enumerated in a previous paragraph, the "rogues, vagabonds and sturdy beggars" continued to increase, until, at the time of Elizabeth, in the 14th year of her reign, a really practical remedy was attempted by an act, which ran thus—"The Justices of the Peace were to tax "and assess all the inhabitants dwelling within the said "division to a certain weekly charge, according to the cir- "cumstances or incomes of parties, to be applied in support "of the poor."

Subsequently the wars in the Low Countries, Spain, Italy, &c., had so reduced the productive industry of the land, that in the 43rd Elizabeth, the Magistrates were empowered to indemnify those that suffered by fire, water, internal commotion, or other casualties; but however much we may praise the humane and charitable motives that induced this legislation,

it was found in practice that only those received assistance who had influence with the local authorities, and that it merely touched the surface of the great evil it sought to check.

From this period until that of the Revolution the state of the poor in this country was wretched in the extreme.

Civil war, with its train of misfortunes, having done its worst, after the lull that took place after the Restoration, we find, from tables prepared by Gregory King, in 1684, that the amount of poor's rate collected in England and Wales amounted to £699,000. If we take into account that the population of the country was less than one-fourth of what it is now, and the value of money about five times the present rate, a mechanic only earning 5d. per day, we may imagine that the poverty in the country was very great. However, during the reign of William and Mary and their successor, we find less indigence, owing, no doubt, to the impetus given to trade by the successful wars carried on by these sovereigns.

During the reign of George I, through the good government and economy practised by the ministers of that king, the poor's rate for the three years previous to the Spanish war of 1739 was but £520,000 on an average; but in 1750, owing to disasters both on sea and land, the cess advanced to £690,000; in 1760 to £960,000; in 1770 to £1,306,000; in 1776, at the commencement of that war which we to this day have cause to regret, viz., with the American colonies, it advanced to £1,520,000; and at the conclusion, in 1783, to £2,132,000. In the year 1800 it amounted to £3,861,000; in 1810 to £5,407,000; in 1812 to £6,680,000; and in 1818 to £7,516,000.

The effects of the wars with Napoleon having ceased, we find the country regaining itself, and in 1823 the sum became reduced to £5,772,962, and in 1824 to £5,736,968.

The prosperity of the country being somewhat checked, we find, in 1832, the cess again advancing to £7,036,968.

Dividing the amount into persons, we find in 1813, 971,913 persons relieved; in 1814, 953,995; in 1815, 895,973, being about 1 in 10 of the population.

We have made 1832 a halting point until the last year, 1868, because in both these years a change in the constitution took place, largely affecting the population in general; and whether it was the result of this particular legislation or not, we have every reason to congratulate ourselves upon the great improvement which then took place in our social condition. A mere superficial observer would remark that we have quite enough wretchedness, poverty and pauperism, and that there were no times like those "when George "the Third was king;" but they who trouble themselves a little with statistics will readily perceive that whilst we have not been able to conquer the great monster of pauperism, we have been able to grapple with it and to keep it in check, and if we have yet much to do, it is pleasing to know that much has been done.

We had, on the 1st of January, 1869, paupers of all classes—

Receiving in-door relief.....	168,417
Receiving out-door relief	878,152
Total	1,046,569

to the amount of £7,498,061, being, on a population of about 21,540,000, 6s. 11½d. per head; whilst in 1813, with a population of about 13,000,000, we had 971,913 paupers, at a cost of about £7,000,000.

Between the years 1832 and 1869, the smallest amount required for the poor was in 1837, at the accession of Her Majesty to the throne. We had then, with a population of about 15,000,000, an expenditure of £4,044,741.

We shall now examine the statistics of the present time—the latest obtainable being for the year 1868.

We find, that with a population of about twenty millions, we have expended in poor relief £7,498,061, being an increase of £538,220 upon the preceding year, the rate per head on the entire population being 6s. 11½d. For this sum 168,417 obtained in-door relief, and 878,152 obtained out-door relief: total number of paupers 1,046,569, or rather more than 5 per cent. of our population. Of this number 316,460 were adult, able-bodied paupers, exclusive of vagrants; 145,750 of these adult able-bodied were in-door paupers; and 170,710 out-door. The increase of pauperism on the year was 61,054, or about 6 per cent.

Relief in aid of wages is given to a greater extent in Lancashire than in any other county.

Of Insane paupers, we have..... 19,033 males.
„ „ ..... 24,124 females.
about ½ ℘ cent. on the population.

The separate statistics for Lancashire are as follows:—

Receipts from poor rates in Lancashire	£1,038,758	17	0	Expended in relief to the poor	£694,540	0	0
Receipts from Government	43,616	12	0	In law expenses	3,532	10	0
				Salaries, &c.....	76,005	9	0
				Sundry expenses not connected with relief	99,804	4	0
Total receipts	£1,082,370	9	0				

The population of Lancashire at the last census was 2,453,910. These consisted of—

34·1	per cent.	of the	Domestic class.
6·6	„	„	Commercial „
6·3	„	„	Agricultural „
24·3	„	„	Industrial „

In-door paupers, able-bodied—

Males.....	563
Females.....	1513
Children under 16	1381

In-door paupers, not able-bodied—

Males	3815
Females	3601
Children under 16	4664

Lunatics—

Males	845
Females	931
Children	107

Out-door paupers, able-bodied—

Males	2,575
Females	10,554
Children under 16	25,586

Out-door paupers, not able bodied—

Males	5,851
Females	16,685
Children under 16	2,377

EMIGRATION OF PAUPERS.

The total amount expended in Lancashire for emigration purposes (that is to say, connected with the Poor Law Board) in 1868 was £5, to send one adult from Bolton to Canada.

The total for the entire kingdom was £167, being for twenty-two persons, of whom twelve were sent to Canada, two to Australia, and eight to New Zealand.

Having examined these statistics, compiled from Government sources, and which are as reliable as any that can be obtained, we cannot but be astonished at the great world of want staring us in the face; and were we only taxed for those persons that are really needy we might have no great reason for complaining, but our system breeds a mass of imposture, and tends to keep alive generations of persons who have lost the honourable pride of self-maintenance.

At the commencement of my paper I divided the poor into three classes.

1. Those that will work but can obtain no employment.
2. Those who, from physical causes, are unable to work.
3. Those that can work and will not.

To the first of these divisions it should be our duty to offer every aid; and in this the Poor Law Board has taken an excellent step in the right direction, by ordering that artizans, who are unable to obtain employment in the district in which they reside, and who are sure of receiving work in another part of the country, may be assisted to proceed thither. This is undoubtedly one of the best ideas that has hitherto been carried practically into effect, because many a mechanic would gladly proceed to another part of England to seek employment but for the fact that, living as he does from hand to mouth, he cannot pay his fare; and many would rather starve than put up with the miseries of tramping, where they have to harbour on the road with the vilest classes.

It would be difficult to manage the relief of the aged and infirm otherwise than as it is at present, though possibly a weekly stipend would save a vast amount in salaries necessitated by the maintenance of our workhouses. The difficulty attendant upon allowing old and infirm paupers a weekly sum in order that they might maintain themselves, arises mainly from the risk that the money given to them might be dissipated by worthless members of their families, whilst the recipients would be as badly off as ever.

We do not generally look to Russia for examples in social economy, but I am informed that in St. Petersburgh aged and infirm paupers are not maintained in workhouses, but are quartered upon persons who notify to the local authorities that they have lodgings to let, and the landlords are paid by the corporation. Further, it is arranged that so many pounds of bread are given by the corporation bakers; so much meat by the butchers; and a suit of clothing periodically, by firms who have contracted for the supply, the corporation paying for the cost of these. A mere trifle in money is given to each, so that it is only possible for them to keep body and soul together. This system avoids the workhouse, entailing as it

does huge buildings, the cost of which is unproductive capital, burdened still more by the salaries of the officials.

Of all paupers, the most difficult to manage are those that can work and will not. Unfortunately we have above a quarter of a million of these, and for the existence of them we have ourselves not a little to blame.

Much as I should regret to see education offensively compulsory—great as I am aware are the difficulties of educating the masses—still, compulsory education would be better than none at all.

When I tell you that of a thousand paupers in one locality only four could read and write well, 297 could read and write imperfectly, and the rest not at all, we have some clue to the cause of pauperism.

You are no doubt aware there are two societies agitating for the elementary education of the entire masses of the kingdom—the one, the Manchester Union, advocating denominational education, to be supported by a national rate—the other, the Birmingham League, urging that education be totally unsectarian, and supported by local rates. Individually I shall not express my preference for either scheme, but we must in self-defence move in this most important matter;—raise the level of the man, and he will be more self-reliant, and feel that shame of taking relief which at present he does not feel. It is more important now than ever, for the masses are now nearly the masters of England, and we dare not delay; indeed it is thought that in the very next session of Parliament a bill will be brought forward to further the elementary teaching of the lower classes of the population.* Our very existence is at stake if pauperism increases.

"Nulla unquam de morte hominis cunctatio longa est."

We must indeed act in this matter, before it becomes too difficult to grapple with.

* Since the reading of this paper this has been done.

You will no doubt have observed the ridiculously small sum spent for emigration purposes. When we consider that we have colonies, whose only want is population, we might transform beings who are a burden to the country into persons who are helping us onward to prosperity. There is undoubtedly a difficulty in making the Government a promoter of emigration, as it would encourage many to apply to Government for assistance to emigrate instead of doing it from their own resources; but some scheme might be devised for making emigrants refund the amount they have cost the Government by gradual repayments.

The most important observation I have to make upon the poor-law system is on the mode of levying the amounts: which is upon property and not upon income, and that it is a local and not a general rate. Whilst some parishes pay 4d. in the pound, and some not at all, others have to pay 2s. and 3s. in the pound; and furthermore, the poorer the parish, the more the householders have to pay, whilst the richer parishes, and those best able to afford it, pay but little. Again, a person that requires large premises to carry on his business, is rated unfairly compared with many trades and professions that require but little space to conduct their business, and which may be possibly more lucrative than the others that require large and expensive rentals. Take, for example, a stockbroker, a solicitor, a public company—each of these requires comparatively less premises than a draper, ironmonger, or manufacturer; the latter are, however, rated far higher for the poor than the former, and many are compelled to have large and showy premises in leading thoroughfares, in order to achieve that which is done in a back office in our larger cities. Were people therefore made to support the poor in proportion to their incomes, the discrepancies would not be so glaring as they are now. Further, a person that derives his income from coupons of stocks and shares, escapes entirely from his

obligation to support the poor if he lives in a moderately-rented house.

This is an ascertained fact, that in an average year, say 1865, when the rate of income tax was 4d. in the pound, it realized £7,985,774; whilst the expenditure for the poor was, for the same year, £6,264,961.

A Government rate upon the whole of the kingdom would be a far more equitable mode of drawing a revenue than the present system, and about 4d. in the pound for poor rate would amply meet the expenditure. Many distinguished political economists have avowed this; but we are aware that our machine of Government moves slowly, though, perhaps, it is better that important changes should be carefully weighed before taking action.

Pauperism is an evil, to remedy which should be the aim and study of practical statesmen. It enervates the country and is a drag upon its resources; and however much we may endeavour to conceal it from others and from ourselves, it is the sorest point in our social economy. Were it not for this, the future of England would be unclouded. How aptly it was said—

> "Oh England! model to thy inward greatness,
> "Like little body with a mighty heart,
> "What might'st thou do that honour would thee do,
> "Were all thy children kind and natural!"—*Henry V.*

THE ORIGIN AND HISTORY OF THE WARRINGTON BLUE COAT SCHOOL.

By John Bowes, Master of the Institution.

(Read March 10th, 1870.)

Among the Greeks, schools in our sense of the term were almost unknown. The Romans had large private establishments, conducted by *Liberti*, in which were taught reading, writing, arithmetic, music, and dancing; but this provision was for the richer classes: for the poor there was none. The mental condition of these children, except in rare instances, was left to the discipline of external circumstances. During the middle ages, there was in our own country a retrogression rather than an advance. Even among the nobles, a high value was not attached to the possession of learning; "Scholarship," as it was called, being regarded as the exclusive prerogative of the monks. It was not till the time of Henry VI that schools for the education of youth began to be established in this country in any considerable numbers. But these were Grammar Schools, and not intended for the poor. It is true that some of them were expressly founded for the instruction of "poôr folks' children," and that in the statutes of many of them provision was made for the admission of such in small proportion, and under certain restrictions; but, taken as a whole, they were for the education of the sons of the middle classes. The right of the poor to a participation in the benefits of learning had not then begun to be acknowledged. The foundation of Grammar Schools for the

benefit of the middle ranks of society was itself regarded as a great concession and privilege—as an extension of education to the utmost limits to which it was necessary or expedient to carry it.

It would be an interesting but rather comprehensive inquiry to write a history of the establishment of primary schools for the instruction of the people. A passing glance at the subject generally will, however, fitly introduce this paper on the Warrington Blue Coat School.

Certain it is that the honour of establishing the first of these schools, for the poor, belongs to ourselves—to us who, as a nation, are so reproached by our continental neighbours for the neglect of the education of our people. If we except those attached to monasteries, the first school erected expressly for the education of poor children was Phillipps' School, Sutton-St. Mary, in Lincolnshire. This school was founded in 1492, in pursuance of the will of the benevolent individual whose name it bears.*

From this time, similar schools sprang up in various parts of the country, though very slowly at first. For eleven years after the foundation of the Phillipps' School, no others were established; but at the end of that time, in 1503, we find that four were founded and endowed. Forty-six years then elapsed without the foundation of a single school of the kind. The intervals between their establishment became, however, less and less, towards the end of the sixteenth century; and from 1600 to 1837 there was not a year that was not marked by the foundation of one or more of these schools. No fewer than ten, twenty, or thirty schools were subsequently erected during the twelve months, while in 1719 no fewer than forty were established. The years in which our forefathers were most industrious in founding these schools were the first

* "Digest of Schools and Charities for Education, as reported on by the "Commissioners of Inquiry into Charities."

thirty-eight years of the eighteenth century, namely about the time of Queen Anne, who did much to promote their establishment.

These schools suggested to continental nations the idea of establishing similar ones for their own people. The English free schools formed the original type of the primary schools of every other European country. In a sermon preached in 1760 by Archdeacon Kennett, it is stated that the good example of England in founding schools had diffused itself through other Protestant states and kingdoms, who after our model were setting up similar charity schools in Holland, Switzerland, Prussia, Saxony, and even in Muscovy.*

I now come to the subject of my paper, which is one that was suggested to me some years ago. I was reminded that Mr. Marsh had dealt ably with our Grammar School, while Mr. Bright had told similarly the tale of the Warrington Academy ;† and that a paper on the Institution over which it has been my privilege to preside for the last eighteen years, would add another chapter to the History of Warrington, and one, too, not devoid of interest. I accepted the task; and in the imperfect performance of it, I must acknowledge my great obligations to the Trustees of the Institution, as well as to Mr. Beamont, Mr. James Nicholson, F.S.A., and others.

The origin of the Warrington Blue Coat School was a very humble one, and dates as far back as the middle of the seventeenth century. Among the School records is preserved "An Account of y^e^ foundation, increase, and management of "Lands and Moneys given for y^e^ education and binding poore "children of y^e^ Township of Warrington to Apprenticeships "and other Charitable uses." The following is an extract:—

1665. "Mr. Allen of Westm^r^ gave by will to y^e^ Church-"wardens of Warrington a Legacy to put out 5

* *Church Education Directory for* 1853.
† *Transactions*, vols. viii and xi.

"several poore boys at 14 years old to Apprenticeships to "Some handicraft trade and to take to their assistance "y^e Overseers of y^e Poore."

1677. "The Said Legacy was paid and was £180. Several "of y^e Principal Inhabitants thought it better to "raise a Stock for y^e Poore than to put out 5 Poore Boys "and did themselves Contribute good Sums to that end and "added £13 19s. 0d. of some old Stock (but does not say "what y^e old Stock was for). And did amongst themselves "appoint Trustees to put y^e Stock to Interest and apply "y^e Produce to y^e use of y^e poore."

"The Trustees did apply it so. Some to put poore Children "to Apprenticeships, to send up Students to y^e Universities, "to Relieve poore old People, to cure the Lame and diseased, "to pay Rents for y^e poore, to Cloath poore Children &c. to "prefer y^m to Services, to carry poore people to London & "Ireland, To pay for y^e table of poore Children, &c., As "Appears by y^e Trustees Acco^ts by which it is plain y^t y^e "Trustees Acted at discretion and laid out y^e produce of "y^e Stock where & as they thought it would do most good "to y^e Poore."

"Note y^t Several of y^e Trustees were founders of y^e Stock."*

The "Stock" thus raised was put out at interest in small sums, as the following records testify:—

	lbs.	s.	d.
George Moores of High Leigh, John Birchall of Culcheth, and John Holcroft of Culcheth, by bond dated 23rd August, 1679	10	00	00
William Turner of Parre, Thurstan Cowley of Windle, and Joseph Potts of Eccleston, by bond dated 1st ffebruary, 1680	30	00	00
Henry Taylor of Knowsley, Thomas Glover of Prescot, and John Barrow of Hyton, by bond dated y^e 29th March, 1681	50	00	00
Samuell Hatton, Matthew Page, and Peter Naylor, all of Warrington, by bond dated 21st November, 1685	40	00	00
Hamblet Woods of Risley, and Henry Woods of Whiston, by bond dated 29th November, 1686	60	00	00
John Chorley of Warrington, by bond dated 1st May, 1689	50	00	00

* *Vide* Note A, Appendix.

The original Trustees being, with Mr. Allen, the founders of the "Stock," acted at discretion and laid out the "produce" in a variety of charitable objects as agreed upon. The following are typical items of expenditure :—

		lbs.	s.	d.
1677.	To John Pickering for a great Booke.....	01	00	00
„	To Widow Tilsley's Son when he went to be an Apprentice	01	00	00
„	To John Burtonwood of Church Street, when he went to be an Apprentice in London...	01	03	00
„	To William Burtonwood when he went to Oxford by the consent of many of the Inhabitants of Warrington	05	00	00
„	To William Burgess with John Harrison his Apprentice	00	02	00
1681.	To the Overseers about Key's daughter going to London	001	00	00
1682.	ffor Cloaths for Agnus Seddons' two sons to prefer them in Manchester	000	19	00
„	Lent by order of the Jury to John Bent and John Banks to follow the suit for the poore against the Parish	005	00	00
1683.	To Widow Lyon towards her journey to London	001	10	00
1689.	Payd wth Thomas Millington's Sonne to send him to London	001	00	00
„	To Thomas Winstanley for Curing his legge...	001	10	00
1693.	Paid Nathan Skelhorn for curing the arme of Widow Clare's child and Saving it from being cut of and for her table.....	002	02	00
1695.	To cash paid Mary Unsworth towards the maintenance of her four fatherless children 4lbs. 1s. 0d. upon which John Mill of Dallam is bound in 20lbs 0s. 0d. that the said widdow and her children shall not be troublesome to the town for three years. This is done by the consent of Mr. John Earle and others			
1705.	P^{d} Eliz. Leyland when she went to Ireland...	2	15	0
1724.	To Dr. Wilbraham towards curing Penketh's man's arm	1	0	0
1733.	To John Turner towards y^{e} Education of his wife's children by a former husband	1	0	0

The name of the first Treasurer to the "poore's money" does not appear, but a Mr. Peake early took an interest in

the working of the Charity, and filled that office, as will be seen from the following entry :—

"The whole Summe of the poore's money of Warrington "received by Mr. Peake as appears by his Papers of accounts "which was in the year 1668, being part of Mr. Allen's "money with 11lbs. 19s. 00d. of the old stocke is in the whole "132lbs. 13s. 02d. The improvement of it by way of interest "47lbs. 15s. 06d. Now add this 47lbs. 15s. 06d. of interest "money to the principal which is 132lbs. 13s. 02d. and then "the whole charge uppon Mr. Peake will be 180lbs. 08s. 08d."

At the death of Mr. Peake the bonds and balance in cash were handed over to the new Treasurer, Mr. Earle,* with the following memorandum :—

"March 29th, 1677.

"The Ballance of this account being 46lbs. 9s. 2d. is this "day paid by Mrs. Peake and the above Bonds given in the "hands of Mr. John Earle fforeman of the Jury."

Mr. Earle filled the office three years in succession, when he handed in his resignation and statement of accounts as follows :—

"A perticuler and exact account of what moneyes and "Bonds are this day delivered by Mr. John Earle unto John "Barnes, Jeremy Smethurst, John Naylor, and Thomas "Chony, being the Trustees nominated and agreed upon this "21st day of October, Anno Dom. 1680."

For the next ten years there were few changes in the Committee of management. The most active Trustees, in addition to those already named, were—

Mr.	Robert Bewley,	first mentioned in	1680.
„	Geo. Darbyshire	„	„ 1680.
„	John Goulborne	„	„ 1680.
„	William Patten*	„	„ 1681.
„	Thos. Heywood*	„	„ 1681.
„	John Chorley	„	„ 1682.
„	Matthew Page	„	„ 1685.
„	John Leech	„	„ 1685.
„	Robt. Birley	„	„ 1686.
„	John Barrow	„	„ 1690.

* *Vide* Note B, Appendix.

A few years' experience sufficed to prove to the Trustees that their capital was not profitably invested, as appears from the following resolution :—

"Anno 1690. Or thereabouts, the Trustees finding that "Several Sums of Mony put to Interest were lost (by people "failing) Resolved to lay out y^e^ Remaining Stock on Lands "w^ch^ cost £471 1s. 6d. The purchase Deeds were made to "y^e^ then Trustees, Mr. Earle, Mr. Will^m^ Patten, & Mr. John "Barnes, And no Special use or Trust mentioned."

Mr. William Patten was Treasurer from 1692 till his death, when Mr. Earle again resumed the office, to be succeeded in 1701 by Mr. Thomas Patten.*

In 1709 "Jonathan Blackburne, Esq.,* Thomas Patten, "John Goulborne, and Thos. Patten were the ffeoffees for "y^e^ lands and monys belonging to y^e^ poore children of "Warrington." In the accounts for that year is the following "entry :—

"Received from Alderman Earle y^e^ Ballance of his father's "acco^ts^ 40lbs. 05s. 03¾d."

The next few years witness the gradual development of the Trust, further sums being invested in land. To effect this desirable object several of the Trustees contributed handsome donations, as appears from the acounts.

"In 1702 Mr. Earle being y^e^ only surviving Ffeoffee "made a Deed of Ffeoffment to the present Ffeoffees Mr. "Blackburne, &c.

"These Trustees (in 1705) bought a piece of Land on "y^e^ East side of y^e^ Heath from the Lady Edgworth which "cost £27."

"The Same being Enclosed, the next year was found "inconvenient for y^e^ Road, my Lord Warrington (upon "application made to him) made a Deed of Exchange whereby "he gave y^e^ South Side of y^e^ Heath for y^e^ East Side w^ch^ "was levelled and improved in 1707 and afterwards Let to "Charles Ranson for 21 years at £8 y^e^ first year and £10 "p^r^ Annum afterwards."

* *Vide* Note B, Appendix.

The following items of expenditure occur in the accounts for 1706 :—

	lbs.	s.	d.
To my Lord Warrington's Steward for Deeds of Exchange for Lady Edgworth's land for y^e South Side of y^e Heath	01	01	06
Spent at the Execution of the Counter part.....	00	01	00

"In 1710 the Ffeoffees having observed y^t y^e buildings in "Hatton Did Every Year Swallow up a great deal of the "Rents to keep y^m in Repair, resolved to pull down all y^e "buildings on Holbrook's tenem^t and to build a good Barn, "Stable, & Shippons, &c., very much wanted on Barrow's "tenem^t which was performed, whereupon Barrow's tenem^t "was Let at £18 10s. ℔ Annum & Holbrook's at £6 ℔ Annum "by w^ch means Rents advanced and Repairs less chargeable.

"So that these two Hatton Estates made consid^rably more "clear mony yearly than they did Before; w^ch together with "y^e Heath Ground £10 ℔ Ann., Westleigh Lands* advancing, "and Several Legacies and gifts coming in to teach poore "Children to Read, Write, &c."

We now arrive at the beginning of the eighteenth century, when so much was done, as I have before mentioned, in the way of establishing primary schools. It was in the year 1711 that this Charity was first constituted an *educational* one. The Trustees of that day (like their successors to the present time), while ready to acknowledge the high value of secular instruction, were strongly impressed with the belief that education to be worthy the name must be based upon religion. That they were actuated by this high view of their responsibilities the following records testify :—

"The present Ffeoffees observing and finding by Experience "y^t to take poore boys, Beggers Rude and unmannerly taught "nothing y^t was good by their Parents, but rather given to "lying, swearing, cursing, gaming, loitring away all y^e Lord's "Day, &c., thus miserably brought up and put to Apprentice-"ships many of y^m overrun their Masters, the Mony lost & "the children come to nothing y^t was good. It was therefore "thought necessary in order to Rescue Such poor Children "from Ignorance and Vitious courses of living & to make

* "Westleigh Lands" were left to the Charity by Arthur Borron, Esq.

"y^m fit for Apprenticeships, to bring them under good Dis-
"cipline first by putting y^m to y^e Charity School, there to
"learn y^e knowledge & Practice of y^e Christian Religion as
"profest in y^e Church of England, to learn to Read, Write
"Say y^e Church Catechism, Sing Psalms, Every Lord's Day
"to go to Church, And on Work Days to prayers, there to
"make their Responses and to behave themselves decently,
"and in these Circumstances to put them to App^{rps} is certainly
"y^e best way to make y^m good $Serv^{te}$ to God and their
"Masters, Good and Serviceable in their Generations, to
"their Neighbours and their Posterities, by bringing up their
"own Children Religiously and Orderly.

"All these things considered The present Ffeoffees did
"Anno 1711 put 24 Boys to School all with Caps and bands
"(And to Encourage their Parents to keep y^m to School) do
"cloath 12 of y^m once a year, and at abo^t 14 years of age
"put y^m to Apprenticeships w^{th} new cloaths, Bible & Common
"Prayer Book."

These boys, thenceforth called the "Blew" boys, attended as day scholars the old Charity School (which was situated in the centre of the town behind Trinity Chapel) from this date till the opening of the present building in 1782. Many have thought that this School belonged to the Trustees, but this was a mistake. The School site appertained to Trinity Church.

The following extracts from the accounts are noteworthy, as showing the price of some kinds of labour and various articles of clothing at the dates indicated. In 1711, 24 boys were supplied with caps and bands, while 12 of them received a complete outfit, including gloves, at a cost of £7 15s. 11½d. The following are the items:—

	lbs.	s.	d.
24 Blew Bonnets for poor Boys	01	03	05½
24 Shirts for 12 Boys	01	07	00
Cloth for bands	00	03	09
Woollen cloth and trimming	02	14	07
Making	00	12	00
Shoes	01	01	06
Buckles	00	01	06
Stockins	00	08	06
Gloves	00	03	08

In 1718 eleven pairs of shoes cost 1lb. 2s. 7d.; Mr. Rowson was paid 6s. 3d. for brass buttons for "ye Blew boys' "cloathes," and 2s. was paid to Mr. Smith, the Schoolmaster, as compensation for being "barred out."*

At the beginning of the year 1721 the following entry occurs, and is signed by the gentlemen whose names are appended :—

"We, whose names are hereunto Subscribed, being appointed "by a Deed of Trust (bearing Date 21 Day of April, 1720) "Trustees for Lands and Monys therein conveyed for "ye Education and binding of Poor Children of the Town "of Warrington apprentices, for the More easy & effectual "discharge of the Said Trust do agree and resolve—

1st.—That the Trustees shall meet twice every year, to Consult and make what orders Shall be thought Expedient in Relation to this Charitable fund; And that ye days of their meeting shall be on the first Thursday in May and ye first Thursday after Warrington Winter fair at Two o'clock in the Afternoon; That whatever shall be agreed upon by a Majority of Trustees then present shall be Observed, provided nothing be ordered that is Contrary to the true meaning and Intention of the aforesd Deed of Trust. And that such Orders and Resolutions Shall be entered in this Book, that Contains an Account of this Charity, and Subscribed by Such Persons as are consenting to the same.

2ndly.—That a Treasurer be Chosen every Year, upon ye first Thursday in May, who shall Receive all Rents, and Interests of Mony belonging to this Charity, and lay out the same according to ye Orders and Directions Proscribed by the Trustees at their Several meetings. And yt ye Treasurer for ye preceding year shall then make his accots and enter ye same in ye Book kept for that purpose to be examined and approved by the Trustees then present.

3rdly.—That five Pounds ℔ Annum be paid to ye Master of ye School behind the new Chapel for teaching poor Boys (whose settlement shall be in ye Township of Warrington) To Read, Write, & Say ye Catechism of ye Church of England; Twelve of which shall be thoroughly cloathed once & have new Shoes & Stockings twice every year, and Eight more, if there be so many in the School, have new Shoes & Stockings only with ye Rest. And that these poor Boys Shall have Books, Quills, Ink and Paper, a Cart Load of Coals every Year Provided and their Shoes mended as there Shall be occasion. And that 2 Shillings Shall be given to the poor Boys at ye Breaking up

* *Vide* Note C, Appendix.

of School at Christmas and Two Shillings at Shrovetide and that y^e^ School be kept in good Repair.

Signed

JONA^N^ BLACKBURNE,

JOHN HESKETH,	THOS. PATTEN,
EDM. TAYLOR,	THOMAS HEYWOOD,
THO. PATTEN,	THO. EGERTON,
JOHN BORRON,	JOHN WORSLEY,
JOHN BLACKBURNE,	JOHN GOULBORNE.

The Warrington "Blews" 150 years ago seem to have imitated their "betters" by indulging in the amusement of "cock-throwing," for in the accounts of 1721, 00lbs. 01s. 04d. is charged for "a cock at Shrovetide and cakes."*

On the 27th day of May, 1738, a new deed of Trust was executed, and the names and description of the Trustees are thus recorded :—

John Blackburne, Esq.†
John Borron, Esq.
John Hesketh, Merch^t^
John Haddon, Clerk.†
Thos. Patten, Gent.†
Matthew Lyon, Gent.†
Arthur Borron, Gent.
Ralph Wright, Linen Draper.
Joseph Dannet, Woollen Draper.
Rob^t^ Patten.†
James Sugden, Clerk.†
William Turner, Linen Draper.
John Fairclough, Gent.
Tho^s^ Lyon.†
John Robinson.
William Hurst, Ironmonger.

The resolutions passed at the meeting in February, 1721, were confirmed, with the following addition :—

"We nominate and appoint James Bolton Schoolmaster "of the said Schoole during pleasure, and that the Rev. Mr. "Sugden, Ralph Wright, and John Hesketh be Treasurers "for this present year, and that they have power to take into "the Schoole such boys as they shall think fit and not exceed-

* *Vide* Note D, Appendix. † *Vide* Note B, Appendix.

" ing the above Number, likewise to put out to Apprenticeships " such boys as they shall think proper, and that Mr. " Lancaster be appointed to Get in Catherine Hoolm's debt " of £50, Mr. Darbyshire's bond of 20£, and Mr. Waterson's " legacy of 40£."*

The Charity seems to have pursued the even tenor of its way, and nothing worthy of remark occurs until it was decided to build the present house, except the appointment of new Trustees.

In 1764 the list was as follows:—

John Blackburne, Esq.*
John Hesketh, Merch^{t}
Rev. John Haddon, Rector.
Thomas Patten, of Bank, Esq.*
Matthew Lyon.*
Rev. Arthur Borron.
Robt. Patton.
Rev. James Sugden.
Thos. Lyon, Merch^{t} *
Robt. Gwyllym, of Bewsey, Esq.
Thomas Blackburne, of Hale, Esq.*
Thomas Patten, Jun., Esq.*
John Lyon, Jun., Esq.*
Edw^{d} Pemberton, M.D.
Rev. Giles Haddon.
Matthew Lyon, Jun., Merch^{t} *
William Hesketh, Merch^{t}
John Bent, Merch^{t}
Robt. Patten, Jun.
John Watkins, Merch^{t} *
Thomas Dannett, Gentleman.
Thomas Lee, Merch^{t}

Three years afterwards the Rev. Edward Owen,* Rector of Warrington, was an active member of the Committee of Management, and in 1770 the Rev. James Stones, Minister of Trinity Chapel, was added to the list.

We now arrive at the eve of a new epoch in the history of the School. Hitherto a limited number of children had been

* *Vide* Note B, Appendix.

clothed and educated only; but now it was proposed to add board and continuous supervision. To effect this most desirable object a large outlay was necessary, as there was no building in Warrington suitable for the purpose. A special subscription was entered into, headed by John Blackburne, Esq. with £500, and followed by the other Trustees and their friends, and a sum of £2,000 was soon available for the purpose of erecting new buildings.

On Nov. 20th, 1778, the following minute is entered :—

"At a meeting of the Trustees of the Charity School in "Warrington, of which Public Notice was given at the Parish "Church and Trinity Chapel, Ordered that Mr. Thos Dannett, "Treasurer to this Charity, be empower'd to order Clay to be "forthwith cast in Alms house field belonging to the said "Charity for the purpose of making Bricks for the Building "of the School intended for the future Education of Children "upon the said foundation and that (if a general meeting be "not called in the meantime) he shall order such a number "of bricks and of such sizes as the said Treasurer shall find "necessary upon consulting Mr. Hope or any other experienced "architect.

"Signed "E. Owen, "Thos Dannett,
"John Watkins, "Wm Hesketh."
"Thos Patten,

The next year the following entries are made :—

"At a meeting of the Trustees of the Charity School in "Warrington of which public Notice was given at the Parish "Church and Chapel. The plan produced by Mr. Hope for "building a Charity School was approved. And it's order'd "that Notice be given in the Manchester, Chester and Liver-"pool Newspapers, that the Trustees of this Charity will "meet on Thursday 1st July, to receive Proposals from such "Workmen as are willing to contract for building the same, "according to a Plan in the hands of Mr. John Watkins.

"Warrington 20th May 1779.

"Signed "John Blackburne. "John Watkins.
"Thos. Patten. "Thos. Dannett."
"Wm. Hesketh.

"July 8th, 1779.

"The Trustees met to receive proposals for the building of "the said Charity School, pursuant to the above order and as "some of the Estimates were made in too general a manner "and furthur explanation necessary the meeting was adjourned "to this day when the Trustees approv'd of Mr. Hope's pro- "posals and do hereby empow'r Mr. John Watkins and "Mr. Thos. Dannett to contract with him and to do what is "furthur necessary towards carrying the same into Execution.

"Signed "Thos. Patten.
"John Watkins.
"Thos. Dannett."

The dawn of 1782 saw the new school, of which the following is an engraving, opened under the name of

"The Warrington Blue Coat Hospital;"

and Mr. John Webster,* of Liverpool, was appointed the first master. I cannot learn anything of Mr. Webster's antecedents; but his children, grand-children, and great-grand-children have been and are among the most respected of the inhabitants of Warrington.

To celebrate the opening of the new buildings, Mr. Owen, rector of the parish, preached an eloquent sermon, a copy of

* See Note B., Appendix.

which is preserved in the library of the Historic Society. The following is a transcript of the title-page :—

"The Resources of Christian Charity: a Sermon upon the "occasion of opening a Charity School in Warrington, for "the purpose of clothing, supporting, and instructing poor "children, upon an incorporated plan, until they are fitted for "business. Preached on Sunday, February 3rd, 1782, by "Edward Owen, M.A., Rector of the Parish."

At page 22 of this sermon the following note occurs :—

"It is a fact which ought not to be concealed (because it "tends to benefit the charity by a distinguished example) "that Dr. Enfield,* though a minister in the separation, "honoured these sentiments by an expressive mark of his "approbation, a liberal contribution, in which he has been "followed by several of the principal members of his society."

The Unitarian congregation is referred to in this note, and I have been informed that Dr. Enfield dismissed his congregation, on this particular Sunday, at an earlier hour, in order that he and they might hear Mr. Owen's sermon, and contribute their alms. The offertory on the occasion amounted to £41 18s. 11½d.

About fourteen years ago the following letter appeared in the "Local Notes and Queries" column of the *Warrington Guardian*. The writer was the late highly-respected Mr. William Richardson :—

"Warrington Blue Coat School.——Sir,—When the "Charity School was removed from behind Trinity Chapel in "the year 1782, to the present building at Town's End, the "scholars were only six in number, but eighteen other "boys and six girls were elected by lot from the town, of "whom I was one, and being found upon examination by old "Mr. Watkins to be the best reader of these new scholars, "my name will be found to stand seventh amongst those ad-"mitted to the present building.†

* * * * * *

"The girls of the school had for a long time no bonnets "over their white caps, nor cloaks as now, and as they

* *Vide* Note B, Appendix. † *Vide* Note E, Appendix.

" walked to and from Trinity Chapel, on a Sunday, when the " weather was cold or wet, they turned their blue woollen " gowns over their heads. At last, the keeper of a public- " house, a Unitarian, Ralph Nixon by name, made each girl " a present of a broad-brimmed black felt hat, and a warm " blue cloak; but it was a long time before they reached the " luxury of a bonnet. We boys were dressed much as at " present, but we had no warm cloaks as now, and our breeches " only reached to the knees, where they buttoned over the tops " of our long blue stockings."

The school was at the outset essentially an "industrial" school, as one half of each day—Saturday excepted—was devoted to manual labour, chiefly weaving. The revenue, at this time, was derived from Annual Subscriptions,* Church Collections,* Occasional Concerts,* a portion of the proceeds of the Boys' Work,* and Rents of Property.

One of the largest rooms in the house was fitted up as a chapel, and a catechetical service, similar to the one so deservedly popular in the Liverpool institution, was introduced, and has been continued to the present time.

Within twelve months after the school was opened, some of the Trustees having died, a number of new ones were elected, as will be seen from the following minute:—

" Warrington, Jan. 21st, 1783. We the Trustees of the " Charity School in this Town do appoint the undermentioned " gentlemen to be Trustees for the said Charity, and do order " a deed to be prepared for that purpose.

" Signed,

" J. BLACKBURNE.
" THOS. PATTEN.
" JOHN WATKINS.
" THOS. DANNETT.
" ARTH. BORRON.

" viz.:—

" John Blackburne, of Hale, Esq.†
" Robert Atherton, of Atherton, Esq.
" Thos. Leigh, of Goulborne Parks, Esq.
" Wm. Banks, of Winstanley, Esq.

* *Vide* Note F, Appendix. † *Vide* Note B, Appendix.

" The Rev. Dr. Patten.*
" The Rev. Edw. Owen.
" The Rev. James Stones.
" Wm. Dumbell.
" Wm. Topping.
" Thos. Lyon.*
" Dr. Thos. Pemberton.
" Richard Phipp.
" Peter Patten, Esq.*
" The Rev. Geoffrey Hornby, Winwick.*
" The Rev. Thos. Blackburne, of Thelwall.*
" Mr. Josiah Dainteth.
" Mr. Thos. Dakin."

Human nature is much the same in all ages. Among children we must expect to find some morose, some obstinate, and some idle: others untruthful, ill-disposed, and discontented. Where numbers live together under the same roof—no matter what their social rank—some or other of these vices are sure to manifest themselves in bold relief. That the Warrington Blue Coat School, eighty-five years ago, was not free from such manifestations the following extracts testify:—

" Augst 5th 1785.

" It was unanimously ordered & agreed, that if any of the " Boys and Girls be found guilty of telling Lies; He, She, " or They must be kept to their Work the three succeeding " Saturday Afternoons, and Fulfil the same Task as on other " Afternoons; and for the second offence, to be kept in double " that Time, & so on in Proportion as their Crime is—At the " same time it was ordered that Isaac Clayton be kept in the " next three following Saturdays to his Loom, & do the same " Quantity of Work as usual, he having been detected before " us of Lying, in saying he was short of Meat, & intended " spreading the same false report about the Town on Saturday " following.

" Also, that, in future, if any of the Boys be bated in the " Price of their Work thro' their own carelessness, they shall " for every Shilling of such Batement be kept to their Work,

* *Vide* Note B, Appendix.

"as many Saturday Afternoons, & do their full Task as "usual.

"Signed, "RICHD. PHIPP. "JOSIAH DAINTETH."
"THOS. DANNETT.

Less than seven years sufficed to prove that amateur manufacturing was unprofitable as a school employment, for in the Report of 1789, "The Managers are apprehensive that the "Labour of the Children is not so productive as it might be, "and wish to confer with some Gentlemen, in the Cotton "Trade, in order to adopt, if possible, a Plan more eligible "than is at present pursued."

In 1792 the Trustees recur to the subject in the following terms:—

"It has been stated for the Two last years that the Trustees "are dissatisfied with the Mode of conducting the Cotton "Business in which the Children are employed, and Assist-"ance from Gentlemen in the Trade has been requested, but "no Improvements have yet taken place."

On the 22nd September, 1801, it is recorded that,—

"At a meeting of the Trustees held this day at the Charity "School it was resolved that the undermentioned gentlemen "shall be appointed additional Trustees, and Mr. Topping be "instructed to prepare a deed accordingly, viz.:—

"Thomas Brooke, Esq.	"Richard Gwillym, Esq.*
"Isaac Blackburne, Esq.*	"John Arthur Borron, Esq.
"Thos. Patten Wilson, Esq.*	"John Pemberton, Esq.
"Thos. Turner, Esq.	"James Stanton, Esq.
"Peter Dutton, Esq.	"Edward Dakin, Esq.
"The Rev. Thos. Borrowdale.	"William Geddes.
"Thos. Skitt.	"Charles Rogerson.
"Thos. Orford.	"Joseph Lee.
"Edward Greenall.	"Richard Sharrat.
"John Howard, Jun.	"James Hilton.

"Signed, "J. BLACKBURNE. "THOS. LYON.
"THOS. BLACKBURNE. "JOHN WATKINS."
"THOS. PEMBERTON.

* *Vide* Note B., Appendix.

Ultimately the business of cotton weaving was given up, but not before it had landed the charity in difficulties.

In 1802 a Committee was appointed "to enquire into the "present mode of conducting the School and to report to a "general meeting of Trustees the result, in order that a per- "manent plan of management of the charity, employment of "the Children, and such other objects as may then come "before them may be decided upon.

"That the Committee be requested to obtain such informa- "tion as they shall be able, of the management of similar "Institutions.

"That a general Meeting of the Trustees be held on the "first Tuesday in July for the purpose of receiving the report "and observations of the Committee, and acting upon them.

"That Mr. Charles Rogerson, the present Treasurer, be "requested to continue his services.

"That the Committee do consist of Mr. Watkins, Mr. "Gwillym, Mr. Dutton, Mr. Lyon, Mr. Borron, Mr. Dakin, "& Mr. Geddes, any three of them to form a Committee."

The general meeting of Trustees was fixed for the first Tuesday in July (6th), but this was found to be an inconvenient day, as the following entry shows:—

"A general Meeting of the Trustees of the said School "having been appointed the 4th of Jany. last to be holden "this Day, and the Election of Members to serve in Parlia- "ment for the Borough of Newton being fixed to take place "this Day also, and several of the Trustees being under the "Necessity of attending the said Election, it is proposed to "adjourn the Meeting to Monday next 12th July, by 11 o'clock "in the Morning, of which Mr. Webster is directed to give "Notice by letter to each of the Trustees.

"Signed, "THOS. LYON.
"THOS. BORROWDALE.
"EDWARD DAKIN."

The adjourned meeting accordingly took place on Monday, July 12th, 1802, when the report of the Committee was read and the following resolutions passed:—

"That it is the opinion of the general meeting of the "Trustees, from the report made to them by the Committee,

" that the present management of the Institution is extremely " defective and radically bad, and that there is a debt of One " Hundred and Seventy-Eight Pounds, thirteen shillings, and " Four pence halfpenny (exclusive of the sum of Four Hun- " dred and Seventy Two pounds which has been advanced at " different times by Mr. Lyon which he now very handsomely " has presented to the Trustees) which there are no means of " discharging. That it appears to them, that the only method " of relieving the Charity from its difficulties will be to dis- " charge, in a proper manner, the Master and Servants, to " bind out the whole of the Children apprentice as soon as " convenient, and that the Institution shall remain shut up " till Lady Day, 1803, by which means it is apprehended that " the Debt will be discharged, and time given for a new set of " regulations to be adopted, calculated to maintain a much " greater number of Children, and to instruct them in a better " manner, both in the School, and with respect to their " Labour."

" That pursuant to the above resolutions, the Institution " be closed on the first day of October next or sooner if the " Committee think fit.

" That the Thanks of this meeting be given to the Com- " mittee for their exertions in favour of the Charity; since " the meeting in January last, and that the same Gentlemen " be requested to continue their useful Labours.

" That Mr. Howard be requested to act as Treasurer to this " Society, and that he be also a member of the Committee.

" That the Rev. Mr. Borrowdale be added to the said Com- " mittee.

" That Mr. Webster be allowed Half a year's salary from " this Time, that he be subsisted as usual in the House, 'till " the Boys and Girls are put out Apprentice, or otherwise " disposed of, and that afterwards he be allowed One Pound, " fourteen shillings a week subsistence Money till the first " day of October next, and after that be permitted to remain " at his own expense in the house if he think fit, to the first " day of January next.

" That the next meeting of the Trustees be on Monday the " third of January next."

The house remained closed against the reception of scholars till the 1st of May, 1804, when it was opened as a *day school*

only, under the direction of Mr. Thomas Bullock (father of Mr. Bullock of Sankey Street), and remained as such for ten years. The following extracts from the school records bear on these matters :—

" At a meeting held January 5th, 1804, it was resolved,—
" That this house be again opened on the first day of May
" next & that twenty Children be admitted.

" That Mr. Thos. Bullock of Shrewsbury, who has offered
" himself as Master of the School, be written to, to come
" over as soon as convenient.

" That a plan of Instruction & Management of this Insti-
" tution in future, be prepared & laid before the Trustees at
" the next meeting by the following Gentlemen—

" J. A. Borron, Esq.,
" Thos. Lyon, Esq.,
" Rev. J. Grant,

" who are so good as to undertake the same.

" That the Rev. Johnson Grant * be added to the Committee.

" That there be a meeting of the Trustees on Monday the
" 23rd Inst. at Parslow's Coffee House."

" At a meeting held January 23rd, 1804, it was resolved,—
" That Mr. Thomas Bullock be appointed Master of the
" School with a Salary of Forty Pounds ℔ Ann^{m} ; but to be
" increased to Fifty Pounds, if at the end of each year his
" Conduct meets the approbation of the Trustees.

" That the expenses of Mr. Bullock in his journey to War-
" rington and back be paid by the Treasurer.

" That the plan submitted for the future regulation of the
" School by Thos. Lyon, Esq., J. A. Borron, Esq., & the
" Rev. Mr. Grant be laid before a Committee who are re-
" quested to examine the same & make such alterations as
" they may think proper."

At a meeting of the Trustees on November 7th, 1808, the following resolution was agreed to :—

" That the Charity being now nearly out of Debt a day be
" appointed for a Meeting of the Trustees to come to a de-
" cision on the future mode of conducting it, and that in the
" meantime enquiry be made of the expense of clothing and

* *Vide* Note B, Appendix.

" keeping the Boys and Girls in the Blue Schools of Lan-
" caster, Manchester, and Chester, and report made to the
" next Meeting."

At a meeting early in the next year the following resolutions are recorded :—

" That the Income of the Charity School appears to be
" 350£ per ann^{m}.

" That the expenses of the Salary of the Master, his house-
" hold, repairs, and Sundries amount to 194£.

" That the remaining sum of 156£ wou'd only maintain
" 8 or 9 Boys at the utmost.

" It therefore appears to the Trustees present that it wou'd
" not be prudent to revert to the *old Mode* of taking Children
" into the House at this Time."

Three years later, viz., in January, 1812, the financial condition of the charity wears a brighter aspect, for it is recorded,—

" That the annual Landed Income of the Charity School
" amounts to the Sum of £411 . 5 . 1½.

" That all the Debts of the Charity being paid off there
" will remain in hand a Sum of about £588.

" That the Trustees present taking into their Consideration
" the flourishing state of the Funds of this Charity, beg leave
" to recommend to the next general meeting to take into their
" consideration such modes of amending the present state of
" the School as may be then laid before them and that they
" wou'd be kind enough in the meantime to turn their atten-
" tion to the proceedings of the National Society for the
" Education of the Poor, commonly called Dr. Bell's plan, an
" explanation of which together with a Copy of these Resolu-
" tions is ordered to be sent to each Trustee."

It was not, however, till March, 1814, that it was decided to re-open the School on the " Old System."

In August, 1813, it was resolved,—

" That the School be opened the 25th of March, 1814, for
" the accommodation of 8 Boys & 4 Girls, to bed & board,
" and to be clothed upon the old System."

" That a School be opened at the same time upon Dr. Bell's
" plan for the instruction of Boys & Girls in the Town &

"Neighbourhood of Warrington as day Scholars, subject to "such Regulations as may be hereafter determined."

"That notice be given to the present Master, Thomas "Bullock, to provide himself with another situation & that "he do quit this School on the 25th of March, 1814.

"That Dr. Blackburne* be requested to seek out at Man- "chester for a proper Master, understanding Dr. Bell's "System, to take the Superintendence of the education of "the Children."

On the 21st of April, 1814, it is recorded,—

"That Mr. Robt. Horrocks having been accepted as Master "from the first of May next, at a salary of £80 ℔ annum, "the Trustees are desirous that he do go as soon as con- "venient to receive the necessary Instruction on the System "of Dr. Bell's Madras School, and that Liverpool appears to "be the most convenient and eligible place."

During my residence in Cumberland from 1845 to 1847, it was my good fortune to become intimately acquainted with the Rev. Charles Cuthbert Southey, (son of the late poet-laureate), Dr. Bell's biographer, and through him with Mr. Davies, Dr. Bell's amanuensis, from both of whom I learned the high reputation the Liverpool Blue Coat Hospital† had attained for proficiency in Dr. Bell's plan of tuition. Indeed for a long series of years it served as a training school for teachers for Liverpool and the neighbourhood, and no primary schoolmaster during this period would have proved a successful candidate for an appointment unless he had been to Liverpool "to learn the system."

No changes of any kind seem to have taken place from 1814 till February, 1832, when it was resolved that Mr. Nicholson (the Law-clerk) be instructed to apply for an Act of Parliament for the future regulation of the Charity. This Act was obtained, and is entitled—

"An Act for empowering the Trustees of the Blue Coat "Charity School in Warrington, in the County of Lancaster,

* *Vide* Note B, Appendix. † *Vide* Southey's Life of Dr. Bell.

"to make Sales, and to grant Building and Mining Leases of "certain parts of the Estates belonging to the said Charity, "and for other purposes therein mentioned."

"A general meeting of the Trustees was held at the School-"house in Warrington, on Thursday the second day of August, "1832, being the fifth Thursday next after the passing of the "said Act, as directed by the said Act," when "the Trustees "present proceeded to qualify themselves to act in the execu-"tion of the said Act by taking and subscribing the Oath or "Affirmation in the form and to the effect prescribed by the "said Act."

The Trustees then proceeded to elect certain gentlemen* to be Trustees of the Charity in conjunction with those already appointed by the Act, and the meeting was adjourned "to "Friday the fourteenth day of September next for the further "proceedings under the Act." At this meeting the "Old "Trustees of the Charity" presented the following report:—

"Warrington Blue Coat School,
"14th Sept., 1832.

"The undersigned, being old Trustees for this Charity, beg "leave to report to this meeting, that after payment of all "Expenses attendant upon the late Act of Parliament ob-"tained for the management of this Charity and otherwise, "there is now a disposable fund in the Banker's hands and "invested in Exchequer Bills amounting to the sum of six "thousand and sixty-five pounds, seven shillings, and ten "pence; that the sum of two hundred and twenty pounds "appears to be due for arrears of rent; and that the present "gross rental of the real Estates belonging to the said Charity "amounts to the sum of four hundred and thirty-two pounds, "twelve shillings or thereabouts.

"J. A. Borron.
"Joseph Lee.
"Edwd. Greenall."

It was further resolved—

"That Mr. Peter Nicholson† be now appointed Clerk to "the Trustees of this Charity."

"That Mr. John Brandwood† be appointed the Treasurer "thereof."

* *Vide* Note G, Appendix. † *Vide* Note B, Appendix.

"That Mr. Robert Horrocks and his wife be now appointed "the Master and Mistress of this School."

Mr. Brandwood the Treasurer died in the November following, and Mr. William Stretch was appointed his successor.

For a number of years previous to this date a "Ladies' "School," for the education and training of girls, was conducted in the building. At a meeting held in November, 1832, it was decided to discontinue this accommodation.

In the spring of 1834 some additions were made to the school premises, consisting of a handsome chapel (funds being left for the purpose by the late John Watkins, Esq.,) and a school-room known still as the "New School." In the chapel is a neat stained glass window, the history of which is contained in the following letter and resolution :—

Warrington, Jan. 14th, 1846.

Gentlemen,

In venturing to address you on a subject which for some time has occupied much of my serious attention, I beg to apologize for taking such a liberty, hoping that the consideration of it will not be displeasing to you.

Through the kindness of one of your body my Son was admitted a day pupil in your noble and valuable Institution, and has for upwards of two years enjoyed the benefits of the superior education there communicated under the tuition of Mr. Forster, which I hesitate not to say could not be obtained in any of the Schools he previously attended.

Being about to take the Boy from School in a short time to work at my own business, I am most anxious to contribute some memorial of my gratitude, not as an equivalent for my son's education, but as a small acknowledgement of the great boon conferred. Strongly impressed with this feeling I stated some time ago to your Treasurer, Mr. Stretch, that I was desirous of placing a stained Glass Window in the Chapel connected with the School similar to the Drawing herewith sent for your Inspection, he recommended that the subject should be brought before the Trustees.

Should you be graciously pleased to allow me the pleasure of expressing my gratitude in this manner, I intend my Son to execute the greater part of the Work under my directions, subject to any improvements or alterations that you might think proper to suggest. With sentiments of much respect I beg to subscribe myself, Gentlemen, your much obliged & obed$^{t.}$ Ser$^{vt.}$

JAMES EDMUNDSON,

P. pro my$^{r.}$ Father R. B. EDMUNDSON.

"Ordered—That the same be inserted on the Minutes, that "his offer to place a painted window in the Chapel be "accepted by the Trustees—with the expression of "their satisfaction at this mode of shewing his "gratitude for the benefits his Son has received "from this Institution."

There is also a Marble Tablet in the Chapel, with the following inscription upon it:—

GRATEFUL FOR THE BENEFITS RECEIVED
FROM THIS INSTITUTION,
AND REMEMBERING WITH GRATITUDE THE MOTHERLY KINDNESS
EVER EXPERIENCED AT HER HANDS,
A NUMBER OF THOSE WHO HAVE BEEN EDUCATED
ON THE FOUNDATION OF THIS CHARITY
HAVE ERECTED THIS TABLET IN THE MEMORY OF

ELIZA FORSTER,

LATE MISTRESS OF THE SCHOOL.
GRACED WITH MANY VIRTUES, A MIND WELL REFINED,
AND AN AFFECTIONATE AND AMIABLE HEART,
SHE WAS AT ONCE A KIND FRIEND AND A SINCERE CHRISTIAN.
ENTRUSTED WITH
THE DOMESTIC MANAGEMENT OF THIS INSTITUTION
FOR A PERIOD OF THIRTEEN YEARS,
SHE DISPLAYED ALIKE ENERGY AND BENIGNITY,
CONSIDERING IT HER CHIEF PLEASURE TO CHERISH AND COMFORT
THE ORPHAN AND THE FATHERLESS.
HER LIFE BEING MEEKNESS, HER DEATH WAS PEACE,
AND HER PASSING SPIRIT, SUSTAINED BY GRACE DIVINE,
GENTLY FLED TO GOD HER SAVIOUR
ON THURSDAY THE 4TH DAY OF MAY, 1848.

"The Memory of the Just is Blessed."—*Prov.* X chap., 7 ver.

Mr. Horrocks successfully conducted the school till his death, which took place in 1835, when Mr. and Mrs. Forster, of Liverpool, were appointed master and mistress. I have been told by pupils who were resident in the Liverpool Blue Coat Hospital at the time, that they well remembered Mr. Forster as a student "learning the System." A former pupil wrote a most interesting account of this gentleman some years ago in the *Educational Guardian*,* under the title,—"My old Schoolmaster and his System of Education."

* Vol. I, pp. 164, 191.

Mr. Forster died in 1852, when the following resolution was entered upon the minutes of proceedings:—

"That the Trustees at this their first meeting after the "death of the late Mr. Forster, Master of the School, desire "to express their unfeigned regret for his loss, and hereby "record their sense of the great benefit derived by the Estab-"lishment from his able superintendence."

On the death of Mr. Forster, the compiler of this paper was appointed his successor, and still continues in that position.

In 1855 a valuable adjunct to this Institution was founded by the old scholars, at the suggestion of the master. It is called, like its parent in Liverpool, "The Blue Coat Brotherly "Society." Its main objects are to visit, advise, and assist boys and girls when they leave school to enter into the great battle of life. Such a society, founded as it is on the principles of brotherly love and Christian Charity, must and will prosper. The annual reunions, held at Christmas in each year, have at all times been of an interesting and enthusiastic character.

Mr. Richardson, whom I have before quoted, thus refers to the inaugural meeting:—

"When the Blue Coat Brotherly Society was commenced, "about a year ago, I was present, and was asked to propose "the first resolution. I cannot express with what pleasure, "almost reaching youthful delight, I again sat down upon the "same forms as were used in my childhood, and saw the same "desks and chairs and tables, as I had known many many "years ago. But how few of my early school-fellows now "live! certainly none in our native town. To the watchful "care which was held over my early years in this Institution "I have always gratefully attributed my length of days and "my comparative prosperity. May it never cease to prosper, "and may others long survive to bear such witness as my "own!"

In 1858 Mr. Skirrow, one of the Inspectors appointed by the Charity Commissioners, paid an official visit to Warrington

for the purpose of enquiring into the circumstances and management of the various charities of the town. After an enquiry, which occupied two days, he pronounced the Blue Coat School to be "one of the best he had ever seen." During the enquiry the Inspector pointed out that the day school was not contemplated by the founders nor by the Act of Parliament, and that if continued it must be conducted by separate teachers. Under these circumstances the Trustees discontinued the day school, and the Institution is now entirely confined to the maintenance, education, and training of the children elected on the Charity.

The "Blues" have ever been taught, besides the highest aims of true education, the value of generous emulation, and to prize high sentiments and gallant actions; always reared and disciplined to support and advance the English name and character in whatever condition of life Providence might place their lot. It is no wonder, therefore, that they should regard their *Alma Mater* as the pride of Warrington, and feel bound that their reputation in after life should be such as to render them a credit to their old School.

Such is an imperfect outline of the Origin and History of the Warrington Blue Coat School. The Trustees from the first have been generous men and able administrators. By their munificence and fostering care Mr. Allen's legacy of £180 was metamorphosed in the course of a century into revenue of a similar amount. To be found in 1841 increased to £450. Seventeen years afterwards it was officially reported to the Charity Inspector to have doubled itself by the further investments of the Trustees, and at the present time the annual income may be stated as £1,400.* A small beginning, and a truly great result!

* This amount includes £200 a year coal rent, which by the Act of Parliament is required to be funded, unless invested in land under the direction of the Court of Chancery.

APPENDIX.

Note A.

A perticular Accompt of all Such persons who hath given any moneys towards the raising of a Stock ffor Binding and putting forth poore children Apprentices in the towne of Warrington.

Impr.	lbs.	s.	d.
1677.—John Allen Borne in Warrington and dyed in St. Margaret's, Westminster, London, being the founder of this stock ..	180	00	00
1677.—Joshua Abraham,* Att the death of his Daughter Mary ..	002	00	00
1677.—Matthew Page,* At the death of his wife Ellin..	001	10	00
1677.—Randle Barnes, At the death of Anne his wife	002	00	00
1677.—Joseph Dutton, At the death of Nathaniell his Sonne	001	10	00
1677.—Hamblet Yate, At the death of Elizabeth his Daughter ..	001	10	00
1677.—Thomas Mather, At the death of Ralph his Brother	002	00	00
1677.—Elizabeth Bulling, At her Death.	005	00	00
1678.—Joseph Dutton, At the Death of Mary his Daughter.....	001	10	00
1680.—Thomas Cason,* In his life time gave	010	00	00
1680.—George Darbishire, In his life time gave	010	00	00
1680.—John Naylor, In his life time gave	010	00	00
1680.—John Barnes, At the Death of Edward his Sonne	005	00	00
1680.—Joshua Abraham, At his Death bequeathed	004	00	00
1680.—George Darbishire, At the Death of Anne his Daughter ..	002	00	00
1680.—Mary Dunbavand, At her Death	002	00	00
1681.—Susanna Patten, At her Death.....	020	00	00
1681.—Nathan Donbavand, Esq., At his Death	010	00	00
1681—John Chorley, At the Death of his Daughter Anne.....	001	00	00
1682.—John Earle, At the Death of Kathrine his Daughter.....	002	00	00
1682.—Hamblet Yate, At the Death of Addam his Sonne.....	002	00	00
1682.—Thomas Harrops, At the Death of Ellin his wife.....	001	00	00
1683.—Henry Blackledge, At his Death gave.....	010	10	00
1693.—Samuell Yates, At his Death	005	00	00
1684.—Walter Barron, At his Death gave	005	00	00
The remainder of an old stocke is	013	19	00
1684.—Robert Birley, In his life time gave.....	010	00	00
1685.—John Golborne, At the death of Elizabeth his wife	005	00	00
1685.—Dorithy Yates, At her Death	005	00	00
1685.—Peeres Legh, Esq., of Bruch, at his Death.....	100	00	00
1685.—Richard Legh, Esq., of Lime, at his Death gave	020	00	00
1687.—Elizabeth Morris, At her Death	005	00	00
1687.—Robert Hack, At his Death gave	005	00	00
Arthur Borron, At his Death gave 2 Tenements in Bedford† in Lease for 2 lives and the inheritance of them for ever.			

* There is a local token of his in the Warrington Museum.

† Called "Westleigh lands" elsewhere.

Note B.

John Earle was an opulent "Maulster" in Warrington, and a direct ancestor of the present Sir Hardman Earle, Bart. His son, Alderman Earle, as Mayor of Liverpool, took an active interest in founding the Blue Coat Hospital in that town. (*Vide* Mr. Hughes' Papers in *Transactions*, vols. xi and ii and iv, N. S.)

The Patten family have taken a warm and active interest in the management of the Charity for nearly two hundred years. The following members of this family have been Trustees:—

I. William Patten, of Patten Lane, was appointed a Trustee in 1681, and was Treasurer from 1692 to 1701.

II. Thomas Patten, of Bank, was appointed a Trustee in 1701. Baines, in his *History of Liverpool*, refers to this gentleman in the following extract:—

The Mersey was not naturally navigable for more than fifteen or twenty miles above Liverpool. The consequence of this was, that goods sent to Manchester, or other places in the interior, had to be forwarded either on the backs of horses in small parcels, or by slow waggons or carts, in either case at a great cost. The first improvement in the Mersey was effected by Mr. Thomas Patten, of Bank Hall, Warrington, about the year 1694, by which the river was made navigable from Runcorn to Warrington. (See *Norris Papers*. 38.) The following extract of a letter from Mr. Patten, will shew how goods were sent forward into the interior from Warrington, in the year 1701. He says, "I have received an answer from Mr. John Hall, of Stockport relating to the carriage of tobacco that way to Hull, which he says is not to be done in the hogshead, or by cart or waggon, but in packs by horses, and although this seems no good method, yet in regard of the slow conveyance hitherto I am resolved to make a trial of it, and would have forthwith twenty or thirty hogsheads sent from Bank-kay to Stockport by cart, where he is to break them into three or four parcels, and after putting them in canvas, to load three parcels upon a horse, and the distance thence to Doncaster (whence they pass to Hull by water) being only thirty-six miles, I presume we may, by employing a great many horses, make a good riddance."

III. Robert Patten was appointed a Trustee in 1738.

IV. Thomas Patten, Junior, son of No. II, was appointed a Trustee in 1764. He served the office of High Sheriff of Lancashire in the year 1773, and of Cheshire in 1775.

V. Robert Patten, Junior, son of No. III, was a Trustee in 1764.

VI. Reverend Dr. Patten, was a Trustee in 1783. He was a friend of Dr. Johnson, and resided some years in Warrington. In a letter from the latter to Dr. Thomas Wilson, of Clitheroe, prefixed to the latter's *Archæological Dictionary*, and dated Dec. 31st, 1782, he writes as follows: "As I "suppose myself to owe part of your kindness to my excellent friend "Dr. Patten, he has likewise a just claim to my acknowledgments, which "I hope, Sir, you will transmit." Dr. Patten also held the Rectory of Childrey in Berkshire, where he inscribed the names of the Rectors of Warrington on one of the windows. He died in 1790, and was buried at Warrington in the Patten Chapel.*

VII. Peter Patten, afterwards Peter Patten Bold, was appointed a Trustee in 1783. He was M.P. for Lancaster, and afterwards for Malmesbury. He was son of No. IV, and took the name of Bold from having inherited the estates of that "great, ancient, and respectable family."

VIII. Thomas Patten Wilson, M.P., was appointed a Trustee in 1801. He took the name of Wilson from having inherited the estates of his relative the Reverend Dr. Wilson, Prebendary of Westminster, son of "good "Bishop Wilson."

IX. The Right Honourable John Wilson-Patten, M.P. for North Lancashire, son of the above, was appointed a Trustee in 1832, and is at present one of the warmest and best friends of the Charity.

* Dr. Kendrick's *Warrington Worthies*, with MS. additions.

The Blackburne family have given substantial support to the charity for more than one hundred and sixty years. The following members of this family have been Trustees :—

I. Jonathan Blackburne, of Orford, was appointed a Trustee in 1709. He served the office of High Sheriff in 1715.

II. John Blackburne,* of Orford, son of No. I, was appointed a Trustee in 1720. He was High Sheriff for the county in 1743. Mr. Beamont has had the following inscription placed on the pedestal of an obelisk which stands at the end of Orford avenue :—

IN HONOUR
OF
JOHN BLACKBURNE, ESQUIRE,
WHO DIED AT ORFORD HALL,
20TH DEC., 1786,
AGED 93.
A BENEFACTOR OF ORFORD, A GREAT BOTANIST,
AND A CHRISTIAN GENTLEMAN,
WHO LOOKED THROUGH NATURE UP TO NATURE'S GOD.

III. Thomas Blackburne, son of No. II, was appointed a Trustee in 1764. He was High Sheriff in 1763.

IV. John Blackburne, of Orford and Hale, son of No. III, was appointed a Trustee in 1783. He was Knight of the Shire for the county of Lancaster thirty-three years, and served the office of High Sheriff in the year 1781.

V. Thomas Blackburne, D D., of Thelwall, son of No. III and brother of No. IV, was appointed a Trustee in 1783. Dr. Blackburne married Margaret, daughter of Sir Richard Brooke, of Norton. In 1800 he was made Warden of the Collegiate Church, Manchester, which he held to the time of his death in 1828. The following character of him appeared in *Wheeler's Chronicle* at the time :—"He was a gentleman of obliging "manners, and of ready access to all persons. He had a very impressive "manner of reading the prayers, in which he was aided by a most power-"ful voice. His discourses from the pulpit were universally allowed to "be excellent, both for the soundness of their doctrine and the true "Christian morality they inculcated. He was in the 67th year of his "age, and he died not less respected than lamented."†

VI. Isaac Blackburne, son of No. III and brother to IV and V, was appointed a Trustee in 1801.

VII. John Ireland Blackburne, son of No. IV, and born at Orford Hall, was appointed a Trustee in 1832. He represented Warrington in Parliament from 1837 to 1847, and is at present one of the two senior Trustees.

VIII. John Ireland Blackburne, junior, son of the above, was appointed a Trustee in 1850, and is one of the present Board.

Thomas Heywood, a Trustee in 1681, was a solicitor in Warrington. His son Thomas was Curate of Sankey Chapel and Master of the Warrington Grammar School.

The Rectors of Warrington have been Trustees for the past one hundred and fifty years. The following names occur in the School records :—

I. Rev. Thomas Egerton ‡ was a Trustee in 1721.

* *Vide* Memoir of him in the *Gentleman's Magazine* for 1789.

† Dr. Kendrick's *Warrington Worthies*, with MS. additions.

‡ Rev. Samuel Shaw, Mr. Egerton's predecessor, left a legacy of £10 to the Charity.

II. Rev. John Haddon was a Trustee in 1738.

III. Rev. Edward Owen was appointed a Trustee in 1783. He was for forty years Rector of Warrington, and for fifty years Head-master of the Grammar School. He was the author of "a Latin Grammar and "Vocabulary;" "Translations of the Satires of Juvenal, Persius, and "Statius," and several printed Sermons, and amongst them a volume which goes under the name of his predecessor—"*Farrington's** Sermons," but which it is understood that he wrote. Gilbert Wakefield, in his "Personal Memoirs," says—"For propriety, perspicuity, and elegance of "expression, Mr. Owen had not many equals, at a time when good "writing is become so general." He died at Warrington in April, 1807.†

IV. The Hon. and Right Rev. Horace Powys, D.D., Bishop of Sodor and Man, was appointed a Trustee in 1832, as Rector of Warrington for the time being.

V. The Rev. W. Quekett was appointed a Trustee in 1854, as Rector of Warrington for the time being.

The following Ministers of Trinity Chapel have been Trustees of the Charity:—

I. Rev. John Worsley was appointed a Trustee in 1720. He married Miss Dorcas Patten.

II. Rev. James Sugden was appointed a Trustee in 1738.

III. The Rev. James Stones was appointed a Trustee in 1783.

IV. Rev. Thomas Borrowdale was appointed a Trustee in 1801.

John Watkins was appointed a Trustee in 1764. "Honest John Watkins," as he was usually styled, was for many years engaged in the business of smelting copper from the ore at Bank Quay, Warrington. The Chapel attached to the School was built out of funds bequeathed by him. He also, by deed, during his life-time, conveyed the reversion of an estate at Sankey, which now yields £200 per annum to the funds of the Charity. Besides this he made the Trustees the residuary legatees under his will.

There is a very agreeable full-length portrait of Mr. Watkins, as a young man, in the entrance-hall of the Blue School, presented in 1847 to the Institution by Mrs. Smith, of Swansea, who was a connection of Mr. Watkins. The following inscription is upon it:—

JOHN WATKINS, ESQ.,
BORN A.D. 1740. DIED A.D. 1821.
HE WAS THE SENIOR TRUSTEE OF THIS INSTITUTION
AT THE TIME OF HIS DEATH,
AND A MOST MUNIFICENT BENEFACTOR TO IT.

Richard Waterson. There is this epitaph on this gentleman in the Warrington Parish Churchyard:—

"November y^e^ 3rd, 1724, was interred Richard Waterson, aged 59, who gave the interest "of fifteen pounds for a sermon at Trinity Chapel, on the 9th April yearly."—This person, it is said, founded a charity school for 26 boys (not the Blue School), in Warrington, with money which he had procured by showing a dancing horse to the people in various parts of the country. This kind of show, which Shakspeare had mentioned a little earlier in *Love's Labour Lost*, where Moth tells Armado that the dancing horse would teach him how to study three years in two words, seems to have been in fashion in that day, for Newcome in his autobiography (i., 82), under February 2, 1656, says—"There was a horse "in the town of Manchester which was taught to do strange things for such a creature "to do;" and Banks, the exhibitor of the learned horse, is figured in Fairholt's Costume in England, fo. 269. He and his horse were taken up and burnt in Italy as sorcerers, about the year 1595. Banks's wonderful horse is alluded to in *Notes and Queries*, July 4, 1857, p. 19.—*Local Notes and Queries, in Warrington Guardian.*

* Mr. Farrington was appointed Rector of Warrington in 1767, and died the same year.

† Dr. Kendrick's *Warrington Worthies*, with MS. additions.

The Lyon family have been warmly attached to the Institution for more than one hundred and thirty years. The following members of this family have been Trustees:—

I. Matthew Lyon was a Trustee in 1738, and continued to be one till the time of his death in 1782.

II. Thomas Lyon, brother of No. I, was appointed a Trustee in 1738.

III. Matthew Lyon, junior, was a Trustee in 1764.

IV. John Lyon, junior, was appointed a Trustee in 1764.

V. Thomas Lyon, eldest son of No. I, was appointed a Trustee in 1783. He was a magistrate for the counties of Chester and Lancaster and Lieut.-Colonel of the Warrington Volunteers. He was for above thirty years an active Trustee, and filled the office of Treasurer. While in that position he presented to the charity the sum of £622. He died in 1818.

VI. Thomas Lyon, nephew of No. V, was appointed a Trustee in 1832. He was the son of the Rev. James Lyon, who was Rector of Prestwich for upwards of fifty years. His mother was a Miss Radcliffe, a descendant of the Radcliffes of Ordsal and Radcliffe Tower in Lancashire. He was educated by the Rev. Dr. Donne of Oswestry. Soon after leaving school he came to Warrington, to reside with his uncle, who adopted him as the sole heir to his large property and estates. He held the commission of Colonel in the Warrington volunteers, and was a Justice of the Peace for the counties of Lancashire and Cheshire. He died in the year 1859. Mr. Lyon's son, Thomas Henry, who served the office of High Sheriff of Cheshire for the year 1866-67, is a member of the present board.

The following Rectors of Winwick have been Trustees:—

I. Rev. Geoffrey Hornby was appointed a Trustee in 1783.

Mr. Hornby was presented to the Rectory of Winwick by Edward, twelfth Earl of Derby, on 7th June, 1781, after the death of Dr. John Stanley. Mr. Hornby has a monumental tablet against the west end of the north aisle of Winwick Church. He died in 1812. In early life he is said to have been in the royal navy, and his curate, the Rev. Giles Chippendall, who lost an arm in the service, is said to have served with him on board the same ship. He married the Honourable Lucy Stanley, the sister of his noble patron, and had by her a family of seven sons and six daughters, all of whom lived to be men and women, and to fill useful and important stations—(1) Edmund, the eldest son, settled at Dalton, and served the office of High Sheriff of Lancashire; (2) James John succeeded him as Rector of Winwick; (3) Phipps, who entered the navy and obtained distinction in the battle of Lissa, was knighted, and became an admiral and one of the Lords of the Admiralty; (4) Geoffrey, who became Rector of Bury; (5) Charles, who was a captain in the Guards; (6) Edward Thomas Stanley took holy orders, and became a Fellow of Oriel College, Oxford, and was author of the beautiful poem of "Childhood;" (7) George, who took orders and became a Fellow of Brasenose College, Oxford, and is still living at Naples; (8) a daughter, who married her cousin, Edward, 13th Earl of Derby; (9) another daughter, who married the Rev. Mr. Champneys; (10) Georgiana, who, after a long life spent in works of piety and active benevolence, died unmarried, and was buried at Winwick; (11) Henrietta, who died at Winwick, also unmarried; (12) Frances, who is still living; (13) Louisa, who is the authoress of Bible Stories, Universal Reform, The Full Loom, The Empty Loom, and many other works which will make her name remembered, and who is, happily, still living at Winwick.—*Local Notes and Queries, in Warrington Guardian.*

II. Rev. James John Hornby, son of the above, was appointed a Trustee in 1835.

III. Rev. Canon Hopwood was appointed a Trustee in 1856, and is at present a member of the Board.

Rev. Johnson Grant was appointed a Trustee in 1804. He was a learned divine and an eloquent preacher, who was first curate of the parish church of Warrington, and afterwards incumbent of St. James', Latchford. He was an active and early promoter of Sunday schools, and the author of various works, particularly, *A History of the Church.* He died at Kentish Town, near London,

of which place he was minister, about the year 1847. At the time of his death, and many years previously, he was rector of Binbrook in Lincolnshire.*

Dr. Enfield was born at Sudbury in Suffolk, in 1741. In 1768, on the death of Mr. Seddon, he became a tutor in the Warrington Academy, and minister of the Unitarian congregation. He was author of the well-known *Speaker*, which bears his name, the *History of Liverpool*, and some volumes of *Sermons*.

Richard Gwyllym was appointed a Trustee in 1801. He served the office of High Sheriff in 1796. The following is a copy of the inscription on his Mortuary Tablet in the Warrington Parish Church :—

This Monument
is erected by the Friends of the late
RICHARD GWYLLYM, OF BEWSEY, ESQUIRE,
at once to commemorate the value of his character,
and to record their deep sense of the loss,
which, in common with his family,
and with the Publick,
they have sustained by his Death.
He was the son of Robert Gwyllym, of Langston,
in the County of Hereford, Esquire.
And of ELIZABETH, his wife, daughter of Richard Aldersey,
of Liverpool, Esquire.
In that awful season of Difficulty and Danger
when England was threatened by foes,
both foreign and domestic,
with active and filial fidelity,
he served her both by his Head and Hand,
ably filling a distinguished place
in the civil and military commissions of his native country.
As a Magistrate diligent and inflexible,
the firmness of his character was tempered by Humanity,
and his Affections regulated by Justice.
As a private man
he was generous, frank, and benevolent,
abounding in all the charities of social life,
and united with those who were nearest to his heart
by every endearment of Tenderness and Love.
In religious Profession,
as he was steadfast in the faith,
so he reverenced the Forms and Establishment
of the Church of England.
In Political Principle,
he upheld the Constitutional Prerogatives
of the British Crown.
On these settled Convictions he formed his life;
by the zealous maintenance of his Country's Laws
and practical exercise of her Religion,
exhibiting the consistent character
of an English Gentleman.
His perishable remains
are interred in the Burial Ground of the British Factory
at Leghorn,
the nearest Protestant Cemetery to the Baths of Lucca,
whither he had been drawn
by the calls of domestic affection,
and where he died after a short illness,
July xviii, Anno Domini mdcccxviii,
in the li year of his age.
His spirit is with the Spirit of the Just;
His Memory and his Example are with us.

Mr. Nicholson died in the year 1851, having practised the profession of the law in his native town, with eminent ability and success, for nearly half a century, and during nearly the whole of which time he had acted as legal adviser of this Charity. In this position he was succeeded by his son Mr. James Nicholson, the present Law Clerk to the Trustees, and one of the best friends of the Institution.

* Dr. Kendrick's *Warrington Worthies*, with MS. additions.

John Brandwood was Postmaster of Warrington and uncle to Miss Flinn (now Mrs. Farmer), a lady to whom the charitable institutions of Warrington for many years were very greatly indebted.

John Webster, son of the first Master, was appointed Organist of the School Chapel, at the age of twelve, which position he filled at intervals for the long period of sixty years. At the time of his death he was a member of the Town Council, Vice-Chairman of the Board of Guardians, and a Manager of the Savings' Bank, Dispensary, Church Institute and National School. Mr. S. M. Webster, of Bridge Street, is his only surviving son.

Note C.

The scholars of the free school at Bromfield in Cumberland assumed a right from old use and wont *to bar out the master*, and keep him out for three days. During the period of this expulsion, the doors were strongly barricaded within, and the boys who defended it like a besieged city were armed in general with guns made of the hollow twigs of the elder or bore tree. The master meanwhile made various efforts by force and stratagem to regain his lost authority. If he succeeded, heavy tasks were imposed, and the business of the school was resumed and submitted to; but it more commonly happened that all his efforts were unavailing. In this case, after three days' siege, terms of capitulation were proposed by the master, and accepted by the boys. The terms always included permission to enjoy a full allowance of Shrovetide sports.—*Hutchinson's History of Cumberland.*

Note D.

In days not very long gone by, the inhuman sport of *throwing at cocks* was practised at Shrovetide; and nowhere was it more certain to be seen than at the Grammar Schools. The poor animal was tied to a stake by a short cord, and the unthinking men and boys who were to throw at it took their station at the distance of about twenty yards. Where the cock belonged to some one disposed to make a matter of business, twopence was paid for three "shies" at it—the missile used being a broomstick. The sport was continued till the poor creature was killed outright by the blows. Such tumult and outrage attended this inhuman sport a century ago, that, according to a writer in the *Gentleman's Magazine*, it was sometimes dangerous to be near the place where it was being practised.—*The Book of Days.*

In the Middle School at Manchester the master provided the cocks, for which he was liberally paid, and which were to be buried up to their necks to be "shied" at by the boys on Shrove Tuesday, and at the feast of St. Nicholas, as at Wyke, near Ashford.—Mr. R. W. Blencowe, in the *Sussex Archæological Collections.*

NOTE E.] THE NAMES, &c., OF THE FIRST THIRTY PUPILS IN THE PRESENT BUILDING.

Extracted from the School Register. (1782.)

Children's Names.	When Born or Baptized.	Time of going out.	Trade.	To whom Bound.
James Morris . .	Born Dec. 25, 1768	Sept. 29, 1783	Grocer	Mr. Leigh.
Thomas Unsworth .	,, April 1, 1769	Sept. 30, 1782	Printer	Mr. Wm. Eyres.
William Hartley . .	,, Aug. 18, 1769	April 1, 1784		
William Unsworth .	,, April 19, 1770	May 19, 1784	Cotton Weaver	Mr. Naylor, of Bolton.
John Robinson . .	,, Jan. 30, 1773	Feb. 1, 1787	Printer	Mr. Wm. Eyres.
John Dunbobin . .	,, July 18, 1771	June 1, 1786	Plumber and Glazier	Mr. Oliver Ormerod, of Manchester.
Wm. Richardson .	Baptized July 3, 1774	Sept. 6, 1788	Verge Maker	Mr. Matw. Hobby, of Liverpool.
Moses Brown . .	Born Oct. 3, 1773	Sept. 29, 1787	Tailor	Mr. Henry Southward.
John Forster . . .	,, Mar. 3, 1773	April 9, 1787	Watch Motion Maker	Mr. Jones, of Prescot.
Halsal Parker . .	,, Jan. 3, 1773	April 9, 1787	Writer	Mr. Kerfoot.
Joseph Bate . . .	Baptized May 1, 1774	April 14, 1788	Sailor	Capt. Simon Marks, of Liverpool.
John Wilson . . .	,, Mar. 1, 1772	May 22, 1786	Ship Chandler	Mr. Moss, of Liverpool.
Joseph Barber . .	,, Dec. 11, 1774	Oct. 27, 1788	Printer	Mr. Wm. Eyres.
John Hatch . . .	,, July 7, 1771	Sept. 29, 1786	Soap Boiler and Tallow Chandler	Mr. Watt.
William Ross . .	,, July 10, 1774	Oct. 20, 1788	Sail Cloth Weaver	Mr. John. Jackson.
Thomas Higginson.	,, Aug. 14, 1774	Feb. 14, 1789	Watch Motion Maker	Mr Thomas Jones, of Prescot.
Richard Mee . . .	,, April 25, 1773	Aug. 24, 1787	Sailor	Capt. Geo. Brown, of Liverpool.
Ralph Bailey . . .	,, Oct. 30, 1772	Jan. 2, 1787	Cotton Weaver	Mr. Green.
William Maire . .	,, April 10, 1774	Aug. 11, 1788	Joiner	Mr. James Leyland.
Robert Jackson . .	,, Jan. 21, 1774	Mar. 3, 1788	Plumber and Glazier	Mr. White.
Isaac Clayton . .	Born Mar. 18, 1772	June 14, 1786	Sail Cloth Weaver	Mr. John Howard.
William Crank . .	Baptized Oct. 4, 1771	Jan. 2, 1786	Grocer	Mr. Sherlock.
Thomas Buckley .	,, Jan. 17, 1773	Sept. 1, 1787	Tailor	Mr. Samuel Fisher.
Robert Taylor . .	,, Jan. 2, 1774	May 1, 1788	Husbandry	Mr. Cartwright, of Burton Wood.
Mary Taylor . . .	1771	Jan. 1, 1786	Housewiv'ry	Mr. and Mrs. Watkins.
Margaret Thomason	,, Nov. 24, 1771	Nov. 1, 1785	Do.	Mr. and Mrs. Dalutith.
Margaret Massey .	1773	Aug. 1, 1787	Do.	Mr. and Mrs. Watkins.
Margaret Crawford .	1773	Aug. 1, 1787	Do.	Mr. and Mrs. Dannett.
Margaret Fairhurst .	1774	Mar. 4, 1788	Upholsterer	Mrs. Ann Rowlinson.
Mary Tomlinson .	1774	May 1, 1788	Housewiv'ry	Mr. J. Boardman.

NOTE F.

Annual Subscriptions in 1791				£148	19 0
"Neat proceeds arising from a Oratorio" in 1791				£55	11 10
Church Collections in 1789—					
Old Church.....	£19	1	10		
Trinity Chapel	£12	12	9	£44	10 2
St. James' Chapel	£12	15	7		
Profit by Weaving in 1796				£4	18 0

July 4, 1791.

Music.
For the Benefit of the
Charity School
In Warrington.
On Thursday, the 4th day of August next,
In the Parish Church,
Will be Performed the
Oratorio
Of Judas Maccabeus,
Under the Direction of Mr. Meredith.

Vocal Performers.	*Instrumental Performers.*
Mrs. Shepley,	The principal Violin by
Mrs. Sutcliffe,	Mr. Wilton, from Liverpool,
Mr. Hatton,	Mr. Atherton,
Mr. Holden,	Messrs. Entwisle,
Mr. Heywood,	Mr. Blennerhassett.
Messrs. Crimes,	Mr. Crawthorne,
Mr. Jackson,	Mr. Reed,
Mr. Dignum, from the Theatre, Liverpool.	Mr. Humphreys, Mr. Crery.

The principal Performers in Liverpool, Manchester, and the neighbourhood are engaged.
The Chorusses will be remarkably full.

Tickets for the Galleries, Five Shillings.—Body of the Church, Half a Crown.—Chancel, One Shilling.

May be had of Mr. Eyres and Miss Bancks, Stationers, or of Mr. Arrowsmith, the Parish Clerk, near the Church; where may be had Books of the Oratorio, at Sixpence each.
Doors to be open at Ten and to begin at Eleven o'clock exactly.

In the Evening there will be
An Undressed Ball, in the Assembly Room.
A Cold Collation, and Catches and Glees.

Blue Coat Charity School in Warrington.

On Sunday, the Eighteenth of October, 1789, in the Afternoon,
A Charity Sermon
Will be preached at the OLD CHURCH, by the Rev. Mr. OWEN, Rector;
On Sunday following, in the Afternoon,
At TRINITY CHAPEL, by the Rev. Mr. SAUL;
And on Sunday, the First of November, in the Afternoon,
At ST. JAMES'S CHAPEL, Latchford, by the Rev. Mr. GLAZEBROOK;
When Collections will be made
For the Benefit of the above Charity School.

Note G.

Trustees appointed under the Act of Parliament obtained in 1832. The names in *italics* indicate members of the present board:—

The Right Honourable Thomas Lord Lilford, Baron Lilford of Lilford, in the county of Northampton; Henry Bold Hoghton, of Bold Hall, in the county of Lancaster, Esq.; Thomas Legh, of Lyme, in the county of Chester, Esq.; *John Ireland Blackburne*, of Eaton Bank, near Tarporley, in the said county of Chester, Esq.; *John Wilson Patten*, of Bank Hall, within Warrington, in the said County of Lancaster, Esq.; Thomas Lyon, of Appleton Hall, in the said county of Chester, Esq.; Thomas Ellames Withington, of Culcheth Hall, in the said county of Lancaster, Esq.; George Bover, of Stockton Lodge, within Appleton, in the said county of Chester, Esq.; Thomas Parr, of Grappenhall Heyes, in the said county, Esq.; Samuel Grimshaw, the younger, of Millbank, within Partington, in the said county, Esq.; John Hodson Kearsley, of Hindley, in the said county of Lancaster, Esq.; the Rev. James John Hornby, Clerk, Rector of Winwick, in the said county; the Rev. Peter Legh, of Newton-within-Mackerfield, in the said county, Clerk; The Rev. William Fox, of Ollerton, in the said county of Chester, Clerk; James Kendrick, of Warrington aforesaid, Doctor of Medicine; Arthur Borron, of Little Woolden, in the said county of Lancaster, Esq.; James Stanton, the younger, of Thelwall, in the said county of Chester, Esq.; Thomas Greenall, of Wilderspool, within Appleton aforesaid, Brewer; John Greenall, of Middleton, in the said county of Lancaster, Banker; John Clare, of Fairfield, within Warrington aforesaid, Merchant; Thomas Lee, of Latchford, in the said county of Chester, Maltster *; William Kidd, of Widnes, in the said county of Lancaster, Sail-cloth Manufacturer +; John Litton, of Warrington aforesaid, Corn Merchant; and Edward Gaskell, of Warrington aforesaid, Sail-cloth Manufacturer.+

* A traveller, in 1720, writes, "This town (Warrington) is famous for malt, which is here brought to as great perfection as at Derby, or elsewhere, and the ale brewed from Warrington malt is not inferior to the most noted ales in England."

+ From a work called *Six Months' Tour through the North of England*, published by Arthur Young, Esq., in 1769, page 163, vol. iii. From Wigan to Warrington land from £15 to £3 10s., and farms from £15 to £100 a-year. At Warrington the manufacture of sail-cloth and sacking are very considerable. The first is spun by women and girls, who earn about 2d a day; it is then bleached, which is done by men, who earn 10s. a week. After bleaching, it is wound by women, whose earnings are 2s. 6d. a week. Next it is warped by men, who earn 7s. a week; and then starched, the earnings 10s. 6d. a week. The last operation is the weaving, in which the men earn 9s., the women 5s., and boys 3s. 6d. a week. The spinners in the sacking branch earn 6s. a week (women); then it is wound on bobbins by women and children, whose earnings are 4d. a day; then the starchers take it—they earn 6s. a week; after which it is wove by men, at 9s. a week. The sailcloth employs about three hundred weavers, and the sacking a hundred and fifty, and they reckon twenty spinners and two or three other hands to every weaver. During the war the sailcloth branch was very brisk; grew a little faint upon the peace, but is now, and has been for some time, pretty well recovered, though not to be so good as in the war. The sacking manufacture was also better in the war, but is always brisk. The spinners never stand still for want of work; they always have it if they please. But weavers sometimes are idle for want of yarn, which, considering the number of poor within reach (the spinners of the sacking live chiefly in Cheshire), is melancholy to think of.—*Local Notes and Queries, in Warrington Guardian.*

BIOGRAPHICAL SKETCH OF WILLIAM EVERARD, ARCHITECT AND SURVEYOR, LIVERPOOL, 1723—1792.

By T. J. Kilpin, Esq.

(Read March 25th, 1869.)

When I last had the honour to address the Society, it was to give a biographical sketch of the brief and brilliant career of one whose genius commanded admiration, and whose early death elicited universal sympathy and regret. But on this occasion I shall not have to interest your feelings and excite your sorrow by setting before you,—as in the case of Harvey Lonsdale Elmes, the architect of St. George's Hall,—the sad spectacle of a strong mind united to a frail body; the fire of genius burning itself out for want of physical stamina to maintain it. I treat now of the unostentatious yet useful career of one who, in the course of it, conferred on Liverpool considerable benefits; and who, in the enjoyment of that great blessing, "*mens sana in corpore sano*," passed an active and prosperous existence, extending nearly to the allotted number of the days of the years of a man's life,—the well-known "threescore years and ten," rarely prolonged by reason of strength to fourscore years,—and died in the possession of affluence and reputation, of all that should accompany old age, "honor and love, obedience, troops of friends."

And, thank Heaven, in every age, and in every civilized country, there are hundreds, nay thousands of such, who pursuing the noiseless tenor of their way, doing their duty well and manfully in that station of life to which it has pleased Heaven to call them, live honoured and die lamented.

This was the case with Mr. Everard, yet his name is, I believe, totally unknown to this generation (except to his direct descendants); and the question naturally arises,—indeed I put it to myself, and underwent a severe mental cross-examination with regard to it—whether, by a paper read before the Historic Society, the attempt to record his merits, and rescue his name from that oblivion which is the lot of the vast majority of the human race, would not appear presumptuous, and prove somewhat uninteresting;—nay, would not be liable to the satire of Cowper, written on seeing some names of little note recorded in the *Biographia Britannica*:—

> "Oh! fond attempt to give a deathless lot
> To names ignoble, born to be forgot;
> In vain, recorded in historic page,
> They court the notice of a future age:
> Those twinkling tiny lustres of the land
> Drop one by one from Fame's neglecting hand;
> Lethæan gulfs receive them as they fall,
> And dark oblivion soon absorbs them all.
> So when a child, as playful children use,
> Has burnt to tinder a stale last year's news,
> The flame extinct, he views the roving fire;
> There goes my lady, and there goes the squire,
> There goes the parson, oh illustrious spark!
> And there, scarce less illustrious, goes the clerk."

Accidental circumstances, however, have made me acquainted with some facts and records of the life of Mr. Everard, and his connexion with Liverpool, for many years of the last century, which I thought might not be altogether uninteresting to the members of the society; and stimulated by this wish and hope, I have ventured to make them the subject of a paper.

A few months ago, calling one morning at the Liverpool Library, my friend Mr. Perris said—"I think, Mr. President, "you will be interested in looking at this" (handing me a card, handsome in design and venerable in appearance) "which "is the business card of a gentleman of your profession, who

"must have practised in Liverpool, judging from the antique "appearance of the card, many years ago." On shewing it to a scientific friend of mine, and asking him if he had ever heard the name, he exclaimed :—"Yes ; I had the honour and "happiness to marry his great-grand-daughter. He was a "man of great and varied scientific attainments, and was "looked up to and consulted—as appears from his papers and "correspondence, quantities of which I have in my possession "—particularly in his latter years, on many important mat-"ters. He was, in fact, the originator of the Liverpool "Library, and the first books purchased for it were kept in a "corner cupboard in his parlour. I have the cupboard now, "and shall be most happy to show it to you, together with "his portrait, both in oil and a miniature, and those of his "father, mother, and daughters, and many things that be-"longed to him, and have been kept in the family above a "hundred years." Accordingly, I availed myself of this friendly invitation, and spent a pleasant evening looking over the portraits, china, and other curious things belonging to the subject of this paper, and finished the evening by drinking to his memory out of this venerable jug, 224 years of age, bearing the date of 1645, just when the great civil war broke out between Charles I and his parliament.

Mr. Storey (whose acquaintance I had the good fortune to make a few years since, when I was acting as architect, and he as engineer, for the Earl of Castlestuart in Ireland) married one of the three Miss Lords, and it is to the care of these ladies and the respect they cherish for the memory of their ancestors, and to the filial affection of the two daughters of Mr. Everard, that, amid all "the sad vicissitudes of things," so much has been preserved of these family memorials. A selection from these Mr. Storey has kindly forwarded for the inspection of the members of this Society.

The late Dr. Macintyre, in a paper read before this

Society in 1857, entitled, "A Historical Sketch of Liverpool," says, after speaking of the establishment, in 1756, of "*Williams' Advertiser*,"—"The foundation of one of our "public institutions, the Liverpool Library, took place also "at this time. A few gentlemen had, for a year or two prior "to 1757, been in the habit of meeting together for the pur- "pose of discussing literary subjects, and of reading a portion "of the periodical publications of the day. They met from "time to time at the house of Mr. William Everard, an emi- "nent mathematician and surveyor, who lived in St. Paul's "Square. The small collection of books brought out on "these occasions was kept in a corner cupboard in Mr. "Everard's parlour."

It was in the year 1757, however, when the books becoming more numerous, had to be transferred from the cupboard to a large chest, that the idea of circulating them among the members of the club came to be entertained and acted upon.

To this cupboard, (still, as you perceive, in excellent preservation, raised 152 years since from doing duty as "a china "closet to the dignity of a book-case," and even now acting usefully and effectually in its original rank and capacity,) permit me to request your attention. Surely, gentlemen, we cannot regard it without a feeling of curiosity and interest, nor help rejoicing in the present happy contrast that the Library now presents to its first small and feeble beginnings. We surely cannot but rejoice when we think that this three-cornered cupboard, this triangular closet, certainly much more fit to be the receptacle of china than of literature, has expanded into that large circular area now enclosed by the walls of the Liverpool Library, and whose circumference is lined with so many thousands of volumes on every subject that can amuse and gratify, interest, instruct and elevate the human intellect.

Dr. Macintyre states that at the date of his paper, the Library contained 46,000 volumes; and at the present time, though repeated weedings have been made from its shelves of works of ephemeral interest and of obsolete novels, the number is 50,000 volumes.

Mr. Everard, who was appointed Librarian, removed from St. Paul's Square to Prince's Street, where he was to find a proper room for the books, and have a reasonable sum "for "that and his trouble."

They did not long remain here, however, for in 1759 they were again removed to a building in John Street, belonging to Mr. Everard. The site of this building, on the west side of the street, about midway between Cook Street and Dale Street, is marked on the map of Liverpool, published by Perry in 1769. The Library occupied the first floor, and was approached by a flight of steps, at the end of a lobby passing through the centre of the building. For this room "and his trouble" Mr. Everard received £10 a year.

This arrangement lasted for twelve years, when the increasing professional practice of Mr. Everard compelled him to relinquish it; but though he no longer acted as Librarian, he still continued to be Landlord till the year 1786. By this time, the Library had enlarged so much beyond the accommodation afforded to it by the room in John Street, that a more spacious one, in a new building in Lord Street, erected on the principle of a tontine, was obtained at a rental of £18 per annum.

The subsequent history of the Library is given in the very interesting paper of Dr. Macintyre, to which I have already alluded.

The portraits which Mr. Storey has been so good as to send for the inspection of the Society, are those of Mr. Everard's father and mother, of Mr. Everard and his wife, and of one of his daughters. His father, who was an extensive farmer

at Linacre, was born in 1683, and died 5th January, 1760, at the age of 77 years. His mother, who died in December of the same year, met with her death in a singular manner, such as no lady in the present generation is likely to experience. She was riding on a pillion, to pay a visit to one of her daughters at Walton during her confinement, when the servant, behind whom she was riding, felt the grasp of her arm relax, and she fell to the ground. She was taken to an inn, then called the "Half-way House"—but long since demolished—and died almost immediately, in all probability of that disorder now called disease of the heart. The portrait of Mr. Everard represents him with a plan in his hand, on which a building is delineated, and he points complacently to a view of the building as it appeared when actually carried out, from which we may reasonably infer that Mr. Everard was not one of those architects of whom it may be said, that their designs look very pretty in the drawing but fail miserably in execution. It is the front elevation of the conservatory at Ince Blundell, and bears conspicuously an inscription in Latin, which, as far as I can understand it, means:—"Here reigns perpetual summer; and the plants of "every climate flourish."

But, gentlemen, I hope you will excuse me if I venture to express my disapproval of the practice of putting up inscriptions in either ancient or modern foreign languages on English buildings. Surely our own most copious, powerful and noble language, which Milton and Shakspeare, and hundreds of others scarce less illustrious, have found sufficient to express their thoughts and embody their ideas, would supply suitable inscriptions for any public buildings, inscriptions that even he who runs may read, instead of one that not ten persons in ten thousand can understand. How much better is the inscription suggested by the late Prince Consort for the Royal Exchange in London—"The earth is the Lord's, and the ful-

ness thereof," than any inscription in another language, that none but a scholar can interpret, and is utterly unintelligible to the million.

I have not been able to identify any building now existing in Liverpool as having been designed by Mr. Everard; but the Liverpool of his day has long since been almost entirely demolished. Mr. Picton said, speaking from the place where I have now the honour to address you, that Liverpool has been almost entirely rebuilt within his recollection, and that sixty years was a very long term of existence for a Liverpool building; and as it is now eighty years since Mr. Everard became a tenant of that narrow house that, alas! awaits us all, it is highly probable that his works have been destroyed by the ruthless hand of time, or fallen before the stately and irresistible march of improvement.

It appears from his correspondence, particularly that with his wife, that he was a good deal employed at Preston and other places in the neighbourhood. That lady, who died 16th May, 1786, aged 61, six years before her husband, appears to have been a most suitable helpmate for him. She evidently was one of those women who are more precious than rubies, though not, I hope, quite so scarce: and her husband not only loved, but trusted and confided in her, even in matters of professional business. Here is a letter from him to her, one of many of a similar description:—

D^r^ Patty,

We had a very pleasant journey & got here before 12 o'clock & found all friends well but not much work done in my absence—I was not able to finish the Gallery Plan for M^r^ Bragg before I left but am very certain Carson will know how to cut the timber from the ground plan and the conversation we had together but for fear he should have forgotten any dimensions I have written them down for his direction & some further particulars respecting other parts of the brick work, which you'll send to M^r^ Bragg immediately and let him know I intend to be in Liverpool on wednesday or thursday next—with due respects to all friends

I am D^r^ Patty,
Yours most affectionately

Preston 21 Apr. 1775. W^M^ EVERARD.

The carefully painted miniature which I now exhibit is of one of his daughters, Miss Nancy, who married Wm. Fleetwood, a barrister, and died 27th March, 1790. Another daughter married Mr. William Smith, a merchant, who, having to make a voyage to Barbadoes, to establish a branch establishment there, was wrecked and drowned the day after he sailed from Liverpool. Here is a specimen of his handwriting, almost equal to copper-plate, written at the commencement of the acquaintance which resulted in Mr. Everard ultimately becoming his father-in-law.

Mr. Everard had two other daughters, Miss Patty and Miss Betty, who died unmarried.

Time rolls on its ceaseless course, and its revolutions often bring round the fashions and, dare I say, the follies of former ages. Here, probably above a hundred years old, are two ball room caps or hats, inside which are inscribed the names of Miss Patty and Miss Betty, fac similes of each other, except that Miss Betty's is a trifle the larger; and here, again, are two pair of ball-room slippers, that doubtless once belonged to the same ladies, the height of whose heels approaches the sublime, while their extreme narrowness borders closely on the ridiculous. I should have deemed the former altogether unparalleled, had I not lately seen them outdone—certainly by the bonnets, so called, I presume, on the principle of "*lucus a non lucendo*," of the fashion of the present day. About the altitude and breadth of the modern heels I am not quite so certain.

The sire of these ladies was not only industrious and prosperous in his profession, but must have been genial in his habits; and he was certainly, on suitable occasions, magnificent in his apparel. That "customary suit of solemn "black," which, like grim death, levels all distinctions of wealth, rank, and profession, and compels the nobleman, the clergyman, the brilliant beau of a ball-room, the waiter of a

hotel, and the solemn undertaker, to the inevitable white cravat and black coat, (causing numberless mistakes as to identity,) was not then in fashion. Behold here, gentlemen, these splendid dress waistcoats of a former age, not quite so brilliant, perhaps, as the celebrated plum-coloured velvet coat of Goldsmith, yet which are still infinitely to be preferred to the monotony of black and white of the gentlemen's attire at ball-rooms of the present day. And that he was a man of genial habits, is, I think, sufficiently proved by this ample and handsome crystal drinking cup, marked with his own initials.

Our forefathers did not, I think, work so hard and anxiously as we are compelled to do in this degenerate age. Even the learned gentlemen who formed the Committee of the Library, more than three-quarters of a century ago, knew how to combine their literary labours and duties with social enjoyment. Dr. Macintyre informs us that on the 13th of August, 1799, a rather amusing resolution was passed. The entry in the Committee Book is as follows :—

"This day for the first time the Committee met at four "o'clock in the afternoon, and having transacted the necessary "business of the Library, they dined together at five o'clock, "and spent the day with harmonious pleasantry; and it was "Resolved unanimously, that the monthly Committee meet "henceforward on the second Tuesday in the month at three "o'clock, and that they afterwards dine together, that dinner "be on the table at four o'clock precisely, and that the bill "be called at six o'clock, when such gentlemen as chuse may "depart, and such as chuse may club again; that red port "be the only wine allowed, and that if any gentleman prefer "white wine, he pay for it, distinct from his share of the "general shot; and that all the wine be brought up in the "original bottles from the bin, and decanted in the Club "room."

But though Mr. Everard could doubtless enjoy his glass, he appears, from the china tea cups belonging to him, and now exhibited, to have had no objection to the "cup that "cheers but not inebriates." The size of these cups, as compared with the modern breakfast cups, renders somewhat less marvellous the stories of Dr. Johnson's enormous capacity for tea drinking. Certainly he described himself as a hardened, inveterate, and shameless tea drinker, who rarely gave his kettle time to cool: who with tea ushered in the evening, with tea solaced the midnight hour, and with tea welcomed the morning; but if his tea cups held no more than these, which a single reasonable sip would nearly empty, there seems nothing wonderful or even wrong, though the green tea during his long life was from 10s. to 15s. per pound, in disposing of twenty or even forty of them.

I must, however, solicit attention to another important fact in connexion with Mr. Everard's career. He was a scientific man, and had studied astronomy. There is a curious drawing by him of the progress of the sun's eclipse that took place in the middle of the last century.

> "His soul proud Science often taught to stray
> Far as the polar star and the Milky Way."

And his philanthropic wish to extend the benefits of science, prompted him to suggest the erection of an Observatory in Liverpool. Here, gentlemen, is an address drawn up by him, recommending the plan to the Corporation and the public of Liverpool, though too long for insertion here; and to this address is appended a list of the first subscriptions, commencing with the Corporation of Liverpool for 50 guineas, and followed by the names of the leading merchants of Liverpool at that time, in their own veritable signatures, forming together a curious and interesting document. The purchase of the land and the erection of the building seem

to have been entirely confided to Mr. Everard. Here is a collection of papers having reference to the observatory; and among them is an agreement with the Rev. Mr. Maddock, then Rector of Liverpool, for the purchase of a piece of land for the site, near St. Peter le Poer, on which Hope Street has been subsequently erected. The site of the Observatory was in all probability that now occupied by the Philharmonic Hall, as being the highest point of Hope Street. I am sorry to observe that though some of the subscriptions are marked as paid, others are without this significant memorandum; and I gather from a number of accounts in the same parcel, all made out to Mr. Everard, that he had not only to act as architect for the building, but to advance money for its erection; that he had not only to act as director of the works, but to dun for the money to pay the tradesmen with. I trust he got his own bill paid for professional services, and that his work was not only a labour of love, but that instead of barren reputation, he was rewarded by profit and emolument also.

After Mr. Everard's death a new Observatory was erected at St. James's Mount, and subsequently another by the Corporation at the north end of the Prince's Dock, with a residence for the astronomer. When a young man, I drew with my own hands the plans for this building, under the direction of Mr. Joseph Franklin, at that time architect and surveyor to the Corporation; but this structure has been superseded by another on a much more extensive scale, which stands on the summit of Bidston Hill.

In concluding, you will perhaps, have pleasure in being informed that Mr. Everard was enabled, notwithstanding his losses and his lawsuits in connexion with the Observatory, to retire from business some years before he died; and he lived a house built for himself at Linacre, where he closed his useful and honourable career in 1792, aged 69.

I cannot, however, bring this paper to a close without expressing the gratitude I feel to his lineal descendants, Mrs. Storey and the two Miss Lords for their great kindness in permitting these interesting family relics to be submitted to the inspection of this Society; and to Mr. Storey for the care and labour he has undergone in selecting and sending over whatever he considered might be interesting and valuable as throwing light on the history of Liverpool, and the incidents, customs, and apparel of bygone generations. He has taken the trouble to make a pious pilgrimage to the graves of his ancestors in Walton Churchyard, where many of the Everards are interred. There is a group of four tombs; two of them rise about three feet from the surface of the ground, and their sides are decorated with panels, while two are of a plainer description; and from these he has transcribed those dates which record their births and deaths, and serve to identify Mr. Everard and his family as the persons mentioned in this paper.

Yet inscriptions, however deeply engraved, are ultimately obliterated by the hand of time, and the stones themselves on which they are chiselled must, sooner or later, fall into decay. But published records are imperishable; and if, with regard to Mr. Everard, I have succeeded in recalling his almost vanished memory, and shall secure for his name an honourable position in the printed transactions of this Society; and if also, gentlemen, during the present evening I have given you the least information or entertainment—then, though at my time of life one seldom indulges in the pleasures of hope, the recollection of this evening will always prove a valuable as well as a permanent addition to the pleasures of memory.

THE EARLY INHABITANTS OF LANCASHIRE AND THE NEIGHBOURING COUNTIES, AND REMAINS OF THEIR MYTHOLOGY AND LOCAL NOMENCLATURE.

By Charles Hardwick,

Author of the "History of Preston and its Environs."

(READ APRIL 7TH, 1870.)

ON several occasions, when discussing obscure questions of early topography or ancient nomenclature, although readily acknowledging the value of all facts in connexion with genuine etymological science, I have recommended great caution in the use of this powerful but somewhat capricious archæological ally. I yet retain a strong impression that this caution is still a necessary condition of truly scientific, historical, or antiquarian research. Consequently several of the presumed etymologies in the present paper are advanced with diffidence, and with a thorough conviction that some of them may prove to be illusive. The suggestion of a probability is, however, a very different thing from dogmatic assertion in such matters,—a practice which cannot be too much condemned.

It is not very many years since the writer of the article LANGUAGE, in *Knight's Cyclopædia*, felt it his duty, in introducing the subject, to use the following strong expressions:—

"That division of grammar which is called etymology, has "been disgraced by such puerile trifling, and has been pur- "sued with such utter disregard of anything like scientific "principles, as to create in the minds of many persons a

" suspicion against everything presented to their notice under " the name of etymology. Such persons have viewed ety- " mology as nothing else than a dexterous play upon words, " and have looked upon etymologists as little else than " indifferent punsters. That the generality of writers upon " this subject scarcely deserve any better appellation will " hardly be denied by any one who has studied etymology " on true philological principles; and, if any doubt were " entertained upon the point, it would only be necessary to " refer to such works as *Damm's Homeric Lexicon* and " *Lenep's Etymology of the Greek Language*, which are full " of such wild conjectures and such extravagant etymologies, " that we cannot be surprised that a study which has produced " such results should have been considered ridiculous and " absurd."

The writer afterwards refers to the extent, and explains the nature of the progress which had been made during the twenty or thirty years previous to the date of his own paper (1839). He justly attributes this progress to the " com- " parison of many languages with each other;" but he especially insists that " nothing has perhaps contributed to " this movement more than the discovery of Sanscrit (for, as " it has been justly observed, it may be properly called a " discovery), which was found to bear such a striking resem- " blance both in its more important words and in its gram- " matical forms to the Latin and Greek, the Teutonic and " the Sclavonic languages, as to lead to the conclusion that " all must have been derived from a common source."

An able writer in the *Saturday Review* truly describes the science of comparative philology as " the great discovery of " modern scholarship, the discovery which, more than any " other, unites distant ages and countries in one tie of brother- " hood." Hence its great value to antiquarian students of every class.

Further investigation has fully demonstrated the truth of the views thus expressed. Not only is the affinity of the languages admitted without dispute, but the consanguinity of the peoples, and the identity of many of their popular traditions and superstitions have been demonstrated with scientific precision, by such writers as the Brothers Grimm, Dr. Kuhn, Dr. Roth, Max Müller, Farrar, Dasent, and others who have devoted special attention to the subject.

This common ancestry is sometimes styled Indo-European; but the phrase being open to objection, as including more than the precise facts justify, the term Aryan, or Arian, is now generally preferred. Some writers regard the Aryans as descendants of Japhet, and the Semitic tribes as the progeny of Shem. In the latter they include the Hebrews, the Phœnicians, the Arabs, and the Ethiopians, and their languages are radically distinct from those of the Aryan family. The country about the Upper Oxus river, now mainly included in the dominions of the Khan of Bokhara, is generally agreed upon as the locality whence the various members of the Aryan family originally migrated, some northward and westward over Europe, and others southward and eastward into India. The Kelts, the Teutons, the Greeks, Latins, Letts, and Sclaves are all European branches of this original stock. The Persians and the high caste Hindoos are the principal descendants of the southern and south-eastern migration. The chief elements of the British population, at the present time, are the Keltic, represented by the Welsh, Irish, and Gaelic tribes; and the Teutonic, which includes Angles Saxons and Jutes, and the Danish and Norse Scandinavians.

The oldest writings extant in the Sanscrit branch of the Aryan tongue are termed the "Vedas." These works include a collection of hymns chanted or sung by the earlier emigrants. It is believed that this collection was formed about fourteen hundred years before the birth of Christ. According

to ancient Hindoo authority these hymns are coeval with creation. It is asserted that Brahma breathed them from his own mouth, or, in other words, that he milked them out from fire, air, and the sun. Some traditions state that they were scattered abroad or lost; and that a great sage, Vyasa, the arranger, collected them together about 5,000 years ago. Vyasa, who was assisted in his labours by many other sages, taught the Vedic literature or religion to four distinct pupils. Payla learned the Rig Veda, Vais'ampayana the Yajur Veda, Jaimini the Sama Veda, and Sumantu the Atharvan'a. The three first-mentioned are named collectively the sacred Trayi, or the Triad. These versions were afterwards much extended and commented upon by other sages.

The term veda is derived from the Sanscrit root *vid*, which signifies "to know." It implies the sum of all knowledge. By another etymology it is held to imply revealed knowledge, or that species of wisdom which contains within itself the evidence of its own truth. Rig is from the root *rich*, "to laud," and implies that the Vedic knowledge is delivered in the form of hymns of praise.

Max Müller regards the Vedas as containing the key note of all religion, natural as well as revealed. They exhibit a belief in God, a perception of the difference between good and evil, and a conviction that the deity loves the one and hates the other. The degenerate religion of the modern Hindoos, and especially the worship of Krishnah, is described by a recent writer as, (in comparison with that of the Vedas,) "a moral plague, the ravages of which are as appalling as "they are astounding."

This discovery of the Sanscrit writings, and especially of the Vedas, has already exercised considerable influence upon etymological science. Before its introduction, the main elements in such inquiries consisted in tracing *backwards* words corrupted or obscure in modern English to their original

roots in Keltic, Teutonic, Greek, or Latin. The Sanscrit, however, being a *written* form of one of the earliest of the varieties of these cognate tongues, gives the etymological student the advantage of a flank or rear position, by means of which he may sometimes decipher the meaning of a doubtful term by the inverse or *ascending* process, and thus gain some knowledge of its original meaning, perhaps long since lost by the descendants of those who first introduced it into the ancient language of Great Britain.

It is by no means improbable that the idle historical legends related by Nennius and Geoffrey of Monmouth respecting the arrival of Brutus and his Trojan followers in Britain, after the destruction of Priam's imperial city by the allied Greeks, may have just so much foundation in fact as might be furnished by a time-honoured tradition respecting the eastern home from which our remote ancestors originally migrated. The natives of Britain, on first coming in contact with the early merchants and traders from the Mediterranean shores, would, doubtless, hear something of the Iliad and the Æneid, with the heroes of which they might innocently confound their own remote and vaguely conceived demi-deities or warlike human ancestry. Notwithstanding the just contempt in which these legends are held by modern historians, there still exists a kind of instinctive faith that a very remote tradition, however much it may have been overlaid and disfigured with relatively modern inventions, lies at the base of the main story. Emigrants from Iberia are said to have settled in Greece (the Pelasgi), and in Tuscany and Spain (the Iberians). The late Rev. John Williams, Archdeacon of Cardigan, in *Essays*, published in 1835, strongly advocates the "Hyperborean theory" founded on a passage in Diodorus Siculus. This view of the case implies that the Hyperboreans migrated mainly by water from central Asia, not long after the days of Noah; that they eventually occupied Great Britain, Spain,

and Gaul, west of the Alps; that the Druid priests of Stonehenge were in sympathy and constant communication with those of Delphi; that they were civilized to a large extent, and were intimately related in blood to the Pelasgians of ancient Greece. In Laurent's *Ancient Geography* is the following passage:—"In the Caucasus were found the Bruchi, "the modern Burtani or Britani, a free tribe, rich in silver and "gold." It is not improbable that the advent of emigrants of this tribe in England may underlie the legend of the Trojan Brutus and his followers. Eastern Albania, too, may have contributed, along with its neighbours, to the migratory hordes which passed to the west. The earliest name by which Britain was known to the Greeks and Romans is Albion. The Gaels of Scotland still speak of the island as Albin. In Merlin's famous prophecy, in Geoffrey of Monmouth's British history, the country is frequently named Albania. The universal tradition of the North German and Scandinavian tribes is that they came from the neighbourhood of the Caucasus to the north-west of Europe. An early Odin is said to have introduced from the East the worship of the sun. Another, at the head of the Œsir warriors, imported the Runic alphabet. He is styled Mid Othin. Two other chiefs of the name figure in their legendary history.

Dr. Leigh held the opinion that the Brigantes, and especially the Setantii, or the Lancashire portion of the then population, were a mixed race, consisting of Kelts, Phœnicians, and Armenians. His only reason for this conjecture appears to have been based on the fact that one of the chief rivers was named Belisama, which, he says, "in the Phœnician language "means the Moon or the Goddess of Heaven," and that Ribel, now the name of the same river, in the Armenian tongue signifies heaven. Mr. Thornber says "Belisama "means Queen of Heaven, and that the Romans paid divine "honours to the Ribble under the title of Minerva Belisama."

This conjecture apparently rests on the statement of Leigh, and the fact that the Roman temple at Ribchester was dedicated to Minerva. There appears to be, however, some error here respecting the sex of Bel. The Phœnician "Queen of "Heaven," or "Queen of the Stars," was named Astroarche or Astarte. She is supposed by some to be identical with the Greek Juno or Selene (the moon), by others she is regarded as the planet Venus. The Armenians were a branch of the Aryan family, and the Phœnicians, as I have before said, were of the Semitic stock.* Sanchoniathon, the ancient Phœnician historian, says that the Phœnicians worshipped the sun, as "the only lord of heaven," under the name of Beelsamen, which was equivalent to the Greek Zeus or the Latin Jupiter. Baal is formed from a root which signifies, and is literally equivalent to, lord or owner. A Maltese inscription, "Malkereth Baal Tsor," is interpreted "King "of the city, Lord of Tyre." In the Septuagint Baal is called Hercules; in the Phœnician language Arcul, light of all. One writer adds "Baal was Saturn; others have "considered Baal to be the planet Jupiter. A supreme idol "might easily be compared with those of other nations; "hence arose this variety of opinions."

Some writers regard the British or Keltic god Bel or Beil as not immediately the Belus or Baal of the Asiatic nations, but that it "designates *an exalted luminous deity* peculiar to "the Celts." This is the view of Jacob Grimm, and it is endorsed by W. K. Kelly, in his *Indo-European Traditions and Folk-lore*. Another writer thinks that the "general "character of Asiatic idolatry renders it likely that Baal "meant originally the true lord of the universe, *and that his* "*worship degenerated* into the worship of a powerful body in "the material world."

* Baldwin, however, in his recent work, *Prehistoric Nations*, contends that the Phœnicians, as well as the Egyptians and others, were descended from the old Cushite Arabs, and were, therefore, Hamitic rather than Semitic in their origin.

Frances Power Cobbe, in her *Cities of the Past*, after visiting the ruins of Baalbec, quotes several beautiful passages from Du Perron's *Zend Avesta*, illustrative of the purity of the sentiment of the earlier fire worshippers. She says:—

"In what degree this high Persian faith (still existing in "no ignoble type among the Parsees of India), was connected "with the sun worship of the gross Phœnician mythology, it "is hard to conjecture. Perhaps there was no relation at all, "and Baal (or Bel), the sun god, never received in his impure "fanes, the homage of a true worshipper of Ormusd, 'the "'supremely wise lord,' of whom the *Zend Avesta* only tells "us, 'his light is hidden under all that shines.' At least the "faith of which Heliogabalus was hierophant had fallen as "low as ever the religious sentiment of human nature may "be debased. Yet does the 'golden star,' Zoroaster, throw a "mysterious halo over the fire-worship of East and West; "that faith which blazed out in the Bactrian plains before "the dawn of history, and which lights yet its memorial fires "each Midsummer eve in the vales of the Christian Scotland "and Ireland."

She might have added, at least until very recently, the hills and dales of Lancashire and some other parts of England.

It is not improbable that before the corruption referred to took place, the Keltic emigrants to this country may have arrived at their Western home, and so have introduced the worship of Baal or Bel in something like its pristine purity; and hence the distinction between the famous deity of Heliopolis and his presumed representative in Britain. A semi-subterranean temple, dedicated to the worship of Mithras, the Persian sun or Apollo, was discovered in 1822 at Housesteads (*Borcovicus*), on the line of the great Roman wall. Mr. Hodgson describes it in detail in a contribution to the *Arch. Æl., O. S.*, vol. i. This worship appears to have belonged to the debased form referred to. It evoked edicts from several Roman emperors decreeing its suppression, but

without avail. This cruel and degrading superstition was, however, not introduced into the western portion of the "old "world," until shortly before the advent of Christ. An altar, dedicated to this deity, found in the cave temple at Housesteads, was erected A.D. 253. Other remains of the worship of Mithras have been found at York and Chester. This worship of Mithras is evidently but a corrupt descendant from the ancient Aryan adoration of Mithra, the god of day-light.

From these and other reasons yet to be advanced, I am inclined to regard the introduction of the British god Bel or Beil as appertaining to a much earlier epoch in our history than the advent of the Phœnician merchants, who most probably did visit the Belisama, the Portus Setantiorum, and other harbours on the Lancashire and Cheshire coast, for trading purposes, but at a relatively much more recent period.

Mr. John Baldwin, in his *Prehistoric Nations*, contends that the "Bronze age in Western Europe was introduced by a "foreign people of the Cushite race, culture, and religion, "and that for a very long period it was controlled and directed "by their influence." He further adds—

"The first settlements of the Arabian Cushites in Spain "and Northern Africa cannot have been later than 5000 years "before the Christian era. . . . . Probably the "Cushite race, religion, and civilization first went to the "ancient Finnic people of Britain, and the Scandinavian "countries from Spain and Africa. The beginning of the "Bronze age in these countries was much older than the "period of Tyre. The Tyrian establishments in those western "countries seem to have been later than the Aryan immigra-"tion that created the Keltic peoples and languages; and it "may be that the Tyrians introduced the 'Age of iron' not "long after their arrival, for it was evidently much older than "the time of the Romans."

Professor Nilsson refers the bronze instruments, &c., to Phœnician influence, and describes some sculpture on two stones on a tumulus near Kivik, which, Mr. Baldwin observes, "even Sir John Lubbock admits, 'may fairly be said to have "'a Phœnician or Egyptian appearance.'"

Mr. Baldwin traces to Arabian Cushite colonies the very ancient civilization of Egypt, Chaldea, and the southern portion of India, as well as Phœnicia and the western nations. Another stone, described by Professor Nilsson, is an obelisk, symbolizing Baal. Referring to this monument, Mr. Baldwin says—

"The festival of Baal or Balder, celebrated on Midsummer "night in the upper part of Norway reveals the Cushite race, "for the midnight fire in presence of the midnight sun did "not originate in that latitude. This festival of Baal was "celebrated in the British islands until recent times. Baal "has given such names as Baltic, Great and Little Belt, "Belteburga, Baleshaugen, and the like."

He asks—"What other people could have brought the "worship of Baal to Western Europe in prehistoric times? "We see them in the stone circles in the ruins at Avebury and "Stonehenge, in the festival of Baal that lingered until our "own times; and there is something for consideration in the "fact that Arabia has still the ruins of ancient structures "precisely like Stonehenge. It is probable that the Arabians, "or their representatives in Spain and North Africa, went "northward, and began the age of bronze more than 2,000 "years before Gades was built."

Mr. Baldwin draws a marked distinction between the modern Mahomedan Semitic population of Arabia, and their great Cushite, Hamite, or Ethiopian predecessors. The former, he says, "are comparatively modern in Arabia," they have "appropriated the reputation of the old race," and have unduly occupied the chief attention of modern scholars.

In several parts of Britain, and especially in Cumberland, altars have been found dedicated by Roman legionaries or their auxiliaries to a god named Belatucadrus. Mr. Thomas Wright (*Celt, Roman, and Saxon*, p. 292), after referring to a small one erected at Ellanborough by Julius Civilis, says—

"Several others dedicated to this deity have been found at "Netherby, Castlesteads, Burgh-on-Sands, Bankshead, and "other places. In some instances, as on an altar found at "Drumsburg, the deity is addressed by the epithet DEO "SANCTO BELATVCADRO. In some altars he is identified with "Mars, as on one found at Plumpton Wall, dedicated DEO "MARTI BELATVCADRI ET NOMINIB. AUG. Several attempts "have been made to derive the name from Hebrew, Welsh, "or Irish, and it has been hastily taken for granted that this "god was identical with the Phœnician Baal. Altars to "Belatucadrus have been found at Kirkby Thore, at Welp "Castle, and at Brougham in Westmoreland. The one found "at Brougham was dedicated by a man named Audagus, "which sounds like a Teutonic name."

Since the preceding paragraphs were written, I have seen in the Manchester Natural History Museum, a rude altar dedicated to this god, which, I am informed, was found some years ago at Ribchester on the Ribble. As I had not previously seen or heard of it, it is not mentioned in my published *History of Preston and its Environs*. The inscription is somewhat defaced, but the DEO MARTI BELATVCADRI is very distinct. It appears, like the one found at Plumpton Wall, to have been dedicated to this god and to the gods of the emperor [*nominib.* AUG], or, as some think, to the reigning emperor himself. The dedicator is Julius Augustalis, the prefect of some military corps, the name of which I cannot at present satisfactorily decipher. The discovery of this altar proves at least that votaries of the deity dwelt in the Ribble valley as well as in Cumberland, &c.

Godfrey Higgins, in his *Celtic Druids*, speaks of Samhan or Saman, as "one of the Gods, the most revered in Ireland." He adds—"An annual solemnity was instituted to his honour, "which is yet celebrated on the eve of the first day of Novem- "ber; which yet at this day is called the *Oidhche Samhna*, "or the night of *Sahman*." He further informs us that he was "also called *Bal-Sab*, or *Lord of Death*," and that "*Samhna* was also the sun, or rather the image of the sun," and adds—

"These attributes of *Samhan* seem at first contradictory, "but they are not unusual among the heathen gods. With "the Greeks, Dionysos, the good Demiurge, is identified with "Hades. In Egypt, Osiris was the Lord of Death; with "the Scandinavians, Odin, the God beneficent, was at the "same time King of the infernal regions. This deity was "above all the others whom we have named, but he was "below the supreme being, Baal. If Samhan were the sun, "as we see he was, he answers to Mithra of the Persians, "who was the middle link between Oromasdes and Arimanes, "between the Creator and the Destroyer, and was called the "Preserver."

The Hindoo Trimûrtti or Triad, namely, Brahma, Vishn'u, and Siva, likewise represents the Creator, the Preserver, and the Destroyer.

Other altars have been found dedicated to gods that may probably be traced to an eastern origin. One found at Birrens, in Scotland, exhibits a winged deity, holding a spear in her right hand and a globe in her left. The dedication is to the goddess *Brigantia*. Mr. Wright says—

"It was supposed this was the deity of the Brigantes, but "I am not aware that this country was ever called *Brigantia*, "and it is not probable the conqueror would worship the "deity of a vanquished tribe. I feel more inclined to think "that the name was taken from *Brigantium*, in Switzerland,

"a town which occupied the site of the modern Bregentz. "An altar found at Chester was dedicated DEAE NYMPHAE "BRIG, which in this case would be 'To the Nymph Goddess "'of Brigantium.'"

Another ancient city styled Brigantium, now Briançon, was situated on an opposite spur of the Alps, in the country of the Taurini, now Piedmont. Ancient geographers speak of a tribe of Thràcians who were styled Briges. In Laurent's work the river at present named the Barrow, in Ireland, is termed the Brigus. A people on the eastern coast of Ireland were called Brigantes, and the name Brigantina is still retained in the province of Gallicia in Spain. Some writers contend that the Gaedhels or Gaels, the Gaelic or Erse element of our population, originally entered Ireland and the south-west of England from Spain. From Ireland they spread, northward, to the Western Isles and Highlands of Scotland, and westward to the Isle of Man and the north of England and Wales.

In one of the preserved extracts from the lost book of *Drom Sneachta*, supposed to have been written before the advent of St. Patrick, is what is termed the "Prime Story of "Irruption and Migration." From this we learn that the ancient Milesian inhabitants themselves had traditions respecting their advent from Spain, which referred to the prior occupation of the country by two other branches of the Gaelic race, viz., the Firbolgs and the Tuatha de Dannan. The story says the Milesians left Scythia for Egypt, but returned, and afterwards migrated to Spain by way of Greece. After a long residence in the peninsula, they built the city of Bragantia about 1700 B.C.; a colony of them landed at the mouth of the Slaney, in Wexford, under the command of the eight sons of Miletias or Galamh. In two battles they defeated their predecessors and divided the country amongst themselves. The Cymri, another branch of the Keltic stock,

on the contrary, entered Britain from Gaul, and were eventually, to a considerable extent, driven upon the Gaelic tribes in the west of England and Wales, by the pressure of their Teutonic successors. Professor Morley says that that portion of the population "in the north of England, who battled "against the gradual progress of expulsion," were "known "as Briganted, fighting thieves. Brigant is Welsh for thief "and highlander."

Perhaps the Aryan mythology will supply a common source for all these local appellations. Walter K. Kelly, (*Curiosities of Indo-European Tradition*) says,—"Agni, "the god of fire (Latin, ignis), has for retainers the Bhrigus "and the Angirases. They are his priests on earth whilst "they dwell there in mortal form; and, after death, they are "his friends and companions in heaven. They are also the "companions of the clouds and storms"—in other words, personifications of clouds and storms. He afterwards speaks of "*Bhrigu, the father of a mythological family of that "name.*" The root of the word means "*fulgent burning.*" The clouds and storms of the Alpine mountains and the Lancashire and Yorkshire hills would amply justify the appellation of the term Brigantium, or the country of the Brigantes, in the minds of Aryan emigrants, to both localities. The Bhrigus, according to Dr. Kuhn, were "brewers" of storms or yielders of the heavenly soma, the "drink of the gods;" in other words, the distillers of rain water, which rendered the earth fruitful. The country of the Brigantes is the term given by the Roman historians to that part of England which lies north of the Humber and the Mersey, and includes the lesser tribes named the *Volantii* and the *Setantii*, or *Sistuntii*, which occupied the western or Lancashire coast and perhaps that of Cumberland.

Another very common name on altars in the north of England is Vitires, Vetiris, or Veteres. Mr. Thomas Wright

regards this as a "foreign deity," and thinks "it must have "belonged to a national mythology." But he adds, "as the "altars were dedicated apparently by people of widely different "countries, they give us no assistance in appropriating this "deity. The word has been supposed to be identical with "Vithris, one of the names of the northern Odin, the Woden "of the Germans." This name for Odin has evidently some relationship to the Vritra of the Hindoo Vedas.

The gods of the Vedas appear to have been all, more or less, personifications of what were termed "the elements." The sun, lightning, clouds, rain, wind, frost, &c., and their attendant active phenomena, contributed mainly to the construction of their mythological edifice. Indra was god of the firmament, the earliest thunderer, the forerunner of Zeus, Jupiter, and Thor; Agni was the god of fire, and Soma was the deity who brought down to earth the celestial liquor, the "drink of the gods," the amrita of the Vedas, the nectar of the Greeks. Soma was so designated because the "soma "plant, which the Hindoos now identify with the *Asclepias* "*acida* or *Sarcostemma viminale*," contained a "milky juice "of a sweetish sub-acid flavour, which, being mixed with "honey and other ingredients, yielded to the enraptured "Aryans the first fermented liquor their race had ever known." All celestial or atmospheric phenomena were named from earthly objects. Clouds were called rocks and cows, and the mountain streams of the former and the milk of the latter were the liquid nourishers and fertilisers of the soil. The lightning god was believed to pierce the rock or the rain cloud, and so water the parched earth. Walter Kelly says,—

"The identity of the heavenly soma with the cloud water, "and the close connection in which fire and soma are brought "in various Aryan legends, prove that the drink of the gods "was conceived to be a product of the storm. It appears "also that the earthly soma was boiled or brewed before it

" was fermented, whence it must have followed, as a matter of " course, that its divine counterpart should be supposed to " undergo the same process. Hence it is manifest that we " cannot claim, for any of the later ages, the credit of having " invented the metaphor involved in the common saying, " ' It's brewing a storm.' In that phrase, as in many others, " we only repeat the thoughts of our primeval ancestors."

Dr. Kuhn identifies the modern word *brew* with the *brajj* of the Rig Veda, which has reference to the roasting of barley for brewing purposes, and is intimately connected with the Bhrigus, beings who " brewed and lightened " the heavenly soma out of the stormy phenomena of the mountain regions. In the Welsh of the present day *brygu* means to grow out, to overspread. One modern Welsh word, *brwysg*, means drunk, and another *brwys*, fertile, luxuriant. The double use of the term at the present time is, therefore, in singular harmony with the hypothesis of Kuhn, and adds much to its probability. Kelly says,—" One of the synonyms of soma is *madhu*, " which means a mixed drink ; and this word is the *methu* of " the Greeks, and the mead of our own Saxon, Norse, and " Celto-British ancestors."

The names of the gods underwent much change as time advanced, and the race was scattered. Bel became the *luminous deity* of some of the settlers in Britain ; Soma became a higher deity in importance than Indra or Agni, and absorbed their attributes. In the Zend version the drink soma is spelled haoma. The hymns addressed to Soma, in a later age, are styled Sama Vedas. Hence it may easily be inferred the Belisama of Ptolemy is a Latinised form of the British words which indicated that the Ribble water was the " liquor of the gods," furnished by Bel and Sama for the fertilization of the earth. The hoary rocky mountains of Pennygent, Ingleborough, and Pendle, and the storm clouds that contended with the lightning about their summits,

furnish sufficiently characteristic natural phenomena to justify the appropriateness of the appellation. This deification of rivers was by no means an uncommon occurrence. Sir William Betham, in his *Gael and Cymbri*, says expressly, "the Celtæ "were much addicted to the worship of fountains and rivers "as divinities. They had a deity called Divona, or the river "god." The Wharf, which springs not far from the source of the Ribble, received these honours from legionaries of Rome or some of their auxiliaries, who appear to have worshipped the stream as the water goddess Verbeia. The Roman name appears to be merely a Latin form of the Ancient-British word of which the modern name Wharf is a corruption. The Lune, too, appears to have had similar honours conferred upon it, as is evidenced by an altar found at Skerton, near Lancaster, inscribed "*Deo Jalono.*" The word Lune was anciently written *Lone*, and the hundred is still named Lonsdale. Indeed, the personification of rivers is not yet extinct. We speak of "Old Father Thames" to this day.

The Ituna Estuarium, of Ptolemy, is universally assigned to the Solway, the chief river entering it being called the Eden at the present time. As *d* and *t* are convertible, and the Latin *i* was pronounced *e*, as on the Continent now, Eduna most probably expresses to our ears the ancient sound, which is the exact counterpart of the modern one, the Latin terminal letter not entering into the question. Do the Vedic and Teutonic mythologies throw any light on the derivation of this name? Kelly says,—

"The cloud maidens are known in the Vedas as *Apas* "(waters), and are styled brides of the gods (*Dêvapatnis*) and "*Nâvyah*, i.e. navigators of the celestial sea. Nearly related "to them, but less divine, are the *Apsarases*, damsels whose "habitat is between the earth and the sun. They are the "houris of the Vedic paradise, destined to delight the souls "of heroes. Their name means either 'the formless' or 'the

" ' water-going,' and they appear to have been personifications " of the manifold but ill-defined forms of the mists; but " other natural phenomena may also have been represented " under their image."

Kelly further informs us that these inferior cloud-maidens possessed raiments or " shirts of swan plumage," by means of which they " transformed themselves into waterfowl, especially " swans." He adds,—" The Persian peris, and the German " swan-maidens, changed their forms in the same way and by " the same means." Indeed, they are " the originals " of these " swan-maidens," and are closely related to the Elves, Mahrs, and Valkyries of the Teutonic mythology. The same writer further states that " Odin's Valkyries (riders in the wild hunt) " had their swan-shirts, and the Norse goddess Freyja" (from whence our Friday) " had her falcon shirt,* which she lent to " Loki, when he went in quest of Thor's stolen hammer, and " to rescue Idunn," (elsewhere spelled Idhunn) " the goddess " of youth, from captivity among the frost-giants. Thiassi, " who kept her in custody, had an eagle-shirt, and his fellow " giant, Suttungr, had another, in which he pursued Odin. " These wild riders of the stormy sky, like their prototypes in " the Vedas, personify or typify ' rain senders.' " The goddess of youth, with her attendant swans and water-fowl, is not an inapt personification of the lovely Eden, in its lower course; while the wild moors and crags, where the eagles nestled, and amongst which its many tributary streamlets spring, aptly enough answer to the homes of the frost giants who, in severe winters, held captive the congealed waters.

The names of the Severn and the Dee, and some other rivers or estuaries, admit of similar interpretation from similar sources. Religious revolutions have often occurred. Dethroned gods were generally degraded into demons. Thus Christian missionaries stigmatised the worship of the heathen

* The falcon, as well as the eagle, was a fire-bringer or lightning-bird.

gods of the Germans and other nations, and transformed them into devils or spirits of evil. The derivation of Deva is from "*div*, heaven, (properly the shining) and means the "heavenly being." And yet the modern Persian *div*, and the Armenian *dev*, imply an evil spirit. George Borrow, in his *Wild Wales*, exclaims,—"How is it that the Sanscrit *devila* "stands for what is wise and virtuous, and the English devil "for all that is desperate and wicked?" Simply because the ancient wisdom and virtue have ceased to be "orthodox."

In the Hindoo mythology it appears that revolutions took place at a very early period. Varuna (the Uranos of the Greeks) at one time enjoyed the reputation of being "lord of "the celestial sea, and the realm of light above it, that "highest heaven in which the Fathers dwelt with their King "Yama. After the southern branch of the Aryans had "entered India, Varuna was brought down from the upper "regions, to be thenceforth the god of the earthly sea, which "had then, for the first time, become known to his votaries."

May not this Varun be possibly the true root of the name Severn? Etymologists are not at all agreed as to its derivation. Some say it was anciently called *Hafren*,* and that this term is identical with Severn, the latter being merely a corruption of the former. This is the prevalent opinion. If such be the case, there is nothing improbable in the conjecture that Hafren is a Keltic corruption of the Sanscrit Varun, especially as the *f* and *v* are readily "convertible." The *Se* may be a prefix, of which more anon.

Geoffrey of Monmouth, in his *British History*, states that King Locrin divorced his Queen, Guendœlena, and married a beautiful captive named Estrildis. On the death of the king the divorced queen commanded "Estrildis and her daughter

* The Severn, indeed, yet retains the name *Hafren*, from its source to Llanidloes. Its principal upper tributary is called the *Vyrn wy*. May not this be the true Welsh root of the word?

"Sabre to be thrown into the river now called the Severn, and "published an edict throughout all Britain, that the river "should bear the damsel's name, hoping by this to perpetuate "her memory, and by that the infamy of her husband. So "that to this day the river is called in the British tongue "Sabren, which, by the corruption of the name is, in another "language, Sabrina."

Milton, speaking of Sabrina as the goddess of the river, styles her "the daughter of Leocrine that had the sceptre "from his father Brute." As the mythical, or rather non-historical, character of Brute and his progeny is now almost universally conceded, it is not impossible that the river named the maiden, (if she ever existed in the flesh) rather than that her immersion changed its designation. Sabrina or Savrina (for the *b* and the *v* are convertible), may, therefore, be but the Latinised form of the old Welsh Hafren and the Sanscrit Varun, with the prefix *Se* added thereto.

The Dee is described as the Seteia Œstuarium by Ptolemy. The Roman city Deva (Chester) was situated on its banks. The *Se* is generally regarded as a prefix in this case, and it may likewise be so in the word Severn. *D* and *t* being convertible, the names of the river and city evidently spring from one root. The Rev. John Whitaker, the historian of Manchester, in interpreting the term Se-tan-tiu, says it may mean the "inferior or southerly country of water, and express the "particular position of Lancashire with respect to the Vo-"lantii and the sea."

The *Se*, in the case under consideration, may have a somewhat similar import, and imply the bringing down of Varuna from his throne on the heavenly to that on the earthly sea.

Since the above was written, I have seen in Capt. Speke's *Journal of the Discovery of the Source of the Nile*, the map of Eastern Equatorial Africa, which accompanied a paper

published in the third volume of *Asiatic Researches*, in 1801. Speke, referring to this paper, says,—"It was written by "Lieutenant Wilford, from the Purans of the ancient Hindus. " . . . It is remarkable that the Hindus have christened "the source of the Nile *Amara*, which is the name of a "country at the north-east corner of the Victoria N'yanza.' I find on this map, on the west side of the inland sea, styled "Lake of Amara or of the Gods," a range of hills named "*Sitanta* M^ts." They are in close contiguity to the "Soma "Giri, or Mountains of the Moon," and seem to be a lower or inferior branch of that range, bordering upon the waters of the great lake. This appears to be a further confirmation of the high probability which exists, that some of the very ancient local nomenclature of Lancashire and the north of England is of Eastern origin. Ptolemy speaks not only of a people inhabiting the district of which Lancashire forms a part, as the Setantii, but of a harbour on the coast, the *Portus Setantiorum, which I and others have fixed at the Wyre.**

Geoffrey of Monmouth says that an invading king of the Huns, named Humber, was defeated by Locrin on the banks of that river and drowned in its flood, "on which account it "has since borne his name." This, of course, is merely idle romance.

Some writers contend that the name was originally Chumber, that Northumberland means North Cumriland, of which the present Cumberland is a relic. It is not improbable that the Mersey derived its name from Mercia, or the territory from the boundary river. It, in conjunction with the Humber, divided Northumbria from Mercia during the heptarchy. The Mersey is still called the "Cheshire waters" by some of the inhabitants on the south-west of Manchester.

It is somewhat singular that no Roman writer or Itinerary

* See *History of Preston and its Environs*, p. 36.

mentions the Humber. Ptolemy speaks of a river Abus, which is generally identified with that stream, but this helps us not to the etymology of the modern name. It is not altogether improbable, however, that the Aryan mythology may throw some light upon the ancient appellation. We are informed by Max Müller that, previous to the dispersion of the Aryan tribes, the Rhibus were called Arbhus, and that this latter term is identical with the Greek Orpheus. From this root, likewise, is derived the German Alb or Alp, plural *Elbe* or Elfen; English Elf, with its plural Elves. If the name of the German river Elbe (Albis) be derived from this source, the probability is heightened that the Abus of Ptolemy may have intimate relationship to the Aryan Arbhus or Ribhus. These mythic beings were followers, like the Bhrigus and the Maruts, of Agni and Indra, "personifications of fire and "firmament." Kelly says of the Ribhus,—"Their element "is rather that of the sunbeams or the lightning, though they, "too, rule the winds and sing, like the Maruts, the loud song "of the storm. Their name means the 'artificers,' and not "even the divine workman of Olympus was more skilled "than they in all kinds of handicraft. The armour and "weapons of the gods, the chariots of the Asvins (deities of "the dawn), the thunderbolt and lightning steed of Indra, "were their workmanship. They made their old decrepid "parents young and supple-jointed again. But the feat for "which they were most renowned is the revival of the slaugh-"tered cow, on which the gods had feasted. Out of the hide "alone these wonder-working Ribhus reproduced the perfect "living animal; and this they did not once, but again and again. "*In other words, out of a small portion of the imperishable "cloud that had melted away in rain and seemed destroyed, "they reproduced its whole form and substance.* Similar "feats were ascribed to the northern thunder god, Thor, whose "practice it was to kill the two buck goats that drew his car,

"cook them for supper, and bring them to life again by "touching them with his hammer."

Kelly further adds that in the "gloomy season of the "winter solstice the Rhibus *sleep for twelve days in the house "of the sun god Savitar; then they wake up and prepare "the earth to clothe itself anew with vegetation, and the* "FROZEN WATERS TO FLOW AGAIN."

The tributaries of the Humber are remarkable on account of their liabilities to sudden floods; and the constant recurrence of these, after long periods of drought, would suggest to a primeval people the interference of celestial beings which possessed the attributes assigned to these Arbhus or Ribhus. Referring to the Greek form of this myth, Kelly says,—

"We see how the cruder idea of the Ribhus sweeping "trees and rocks in wild dance before them, by the force of "their stormy song, grew under the beautifying touch of the "Hellenic imagination into the legend of that master of the "lyre, whose magic tones made *torrents pause and listen, "rocks and trees descend with delight from their mountain "beds*, and moved even Pluto's unrelenting heart to pity."

The estuary on the opposite coast of Britain to the Severn, now known as the Wash, is called by Ptolemy, Metaris. May not this name have had, originally, some connection with Varuna's friend Mithra? Kelly says,—

"When the sun was still a wheel, a store of gold, a swan "or a flamingo, an eagle, falcon, horse, and many other "things, it was also the eye of Varuna; just as amongst the "Anglo-Saxons and other Germans it was held to be the eye "of Woden. Varuna and Mithra (the friend), *the god of "daylight*, used to sit together at morning on a golden throne, "and journey at even in a brazen car."

The sun, at the dawn at least, gilded the waves of the eastern estuary and shed its ruddier glow at evening on the western or Severn sea. Under any interpretation, the coinci-

dence of so many names and half-hidden characteristics is, to say the least, very remarkable.

There is nothing extravagant in this attempt to show that the terms thus applied conveyed both a literal, or earthly, as well as a figurative, or celestial, meaning. All mythology is fashioned out of such materials. Primitive languages are limited in the number of their words, and, of necessity, are highly figurative. The tongues of all the North American Indians, as well as those of the tribes of Aryan and Semitic origin, markedly exhibit this peculiarity. Farrar, in his *Essay on the Origin of Language*, says,—

"To call things which we have never seen before by the "name of that which most nearly resembles them is a practice "of every day life. That children at first call all men 'father' "and all women 'mother' is an observation as old as Aristotle. "The Romans gave the name of Lucanian *ox* to the elephant, "and *camelopardus* to the giraffe, just as the New Zealanders "are stated to have called horses *large dogs*. The astonished "Caffers gave the name of *cloud* to the first parasol which "they had seen; and similar instances might be adduced "almost indefinitely. They prove that it is an instinct, if it "be not a necessity, to borrow for the unknown the names "already used for things known."

ON GREEK COINAGE.

By B. L. Benas, Esq.

(Read 24th February, 1870.)

Many doubtless will have read a very entertaining chapter in a work by the late Archbishop Whateley, wherein he shews, by a species of jocular logic, how it might be proved that Napoleon Bonaparte had never existed; and this has not a little helped to ridicule the growing practice of the age towards scepticism in everything. The personality of Homer has been repeatedly denied, Romulus and Remus have been laughed away, and profane hands have even been laid upon our own immortal Shakspeare; but if there is any one science more than another that has tended to erect a scaffolding round the past—to restore its faded frescoes, to bring forth prominently its beautiful arabesques and tracery—it is the science of *Numismatics*. To it we owe many a new leaf in the volume of history. We have Jupiter once more,—the thunderbolts in his hand, visibly before us. We have the whole galaxy of Mount Olympus, I was going to say in the flesh again: but no, far more durable than that, we have them standing forth in the very metal, cast by the very hands of those that worshipped them. In the coins of the Grecian colonies we have the Argonautic expedition, and the golden fleece dangling before our eyes; the 10,000 men, with Xenophon at their head, retreating to their home, their lares, and penates. The names of Alexander, of Ptolemy, of Seleucus and Lysimachus show vividly the march of a handful of Greeks into the Persian territories; and we can imagine Granicus, Issus, and Arbela once more. It is a science that repays the little labour it demands from its votaries ten-fold; for, at every step, new and unalloyed pleasures are unfolded to the gaze of the student. The origin of coined money is veiled in the

deepest obscurity. In Holy Writ, the money that Abraham weighed unto Ephron, after a lapse of 400 years, developes into the shekel of the Sanctuary; which, from being a weight originally, came to be adopted as a coin. This seems throughout the entire period of Old Testament history to have been the coinage of the Hebrews, and continued later, until their political extinction.

In this collection there is a very excellent shekel of Simon one of the Maccabees, having upon the obverse the sacred candlestick, and on the reverse the rod of Aaron that budded. The inscription is "Simon the Messiah of Israel;" and on the obverse "Jerusalem the Holy." Throughout the whole of the Homeric Cantos, we do not find a single mention of the term money; but, on the contrary, we find in the Trojan period that an ox was changeable for a bar of brass, and a woman who understood several useful arts was considered worth four oxen.

It is strange that Athens, which was preeminent above all other Grecian states for art and culture, was not the most celebrated for the execution of its coinage, although the pieces were the best known in all the Hellenic states, and the most widely circulated. The Athenian coins generally bear the impression of an owl, being the bird of Pallas Athene, the Minerva, and tutelary deity of the city.

A very peculiar coinage to Greece was the incused money, the figure forming a kind of relief on the obverse and sunk on the reverse. One of undoubted antiquity is of the colony of Sybaris, an island on the Asiatic coast of the Mediterranean, and of which an excellent specimen is in this collection. Sybaris was built 721 B.C., and destroyed 510 B.C. It was afterwards named Thurium, and minted some of the most beautiful coins of ancient times. It is not exactly known for what purpose the money was incused; it is thought by some to be the mark of the punch, by others a means to prevent their forgery.

Some of the most beautiful Grecian specimens are those of Sicily, especially of Syracuse, the heads of which are simply perfect, and present to us the very ideal of female beauty. Add to this the coiffure, which is at once chaste, natural and elegant;—it will be observed that the Grecian ladies, like those in modern times, wore a very thin almost invisible net to protect their head-dress. Another noteworthy object is the jewellery, especially the earring, which we at the present imitate as the latest fashion.

The reverse of the Syracusan coins have the quadriga or chariot. In all their public buildings, statuary, squares, as well as in their coinage and vessels of household use, we find among the Greeks the equine beauty mingled with that of the human; partly, no doubt, from the exquisite grace which the true breed of the horse possesses, and secondly to typify the triumph of human skill over the brute.

In order somewhat to guide the uninitiated in recognising the coinage of Greece and her colonies, we append the following list of the types, which has been collected from various sources (principally from *Noel Humphreys' Manual*) and arranged alphabetically: —

Abdera. A lyre, a griffin.

Abydos. A full face or mask.

Acanthus. (Macedonia.) A lion springing on the back of a bull. Very early coins of this city have sometimes the fore part of a bull only.

Acarnania. Apollo sitting on a kind of throne, extending one arm with a bow.

Achaia. The monogram of Achaia, and a lyre with a wreath.

Ægal. An ass suckling a chimæra.

Ætolia. Wild boar.

Ætolia. A hero leaning on a knotted stick, on one arm a mantle and sword.

Ainos. (Thrace.) Reverse, a goat.

Amisus. The parazonium.

Amisus. An eagle on a thunderbolt.

Amphipolis. A trophy.

Amphipolis. A torch in a kind of stand.

Andros. (Island.) A vase with two handles, and a bunch of grapes.

Andros. (Cyclades.) A panther.

Antioch. A ram running, the head turned back towards a crescent and stars.

Apollonia. (Illyria.) A cow suckling a calf.

Arcadia. Pan sitting on a rock.

Argos. The fore part of a wolf, more anciently two dolphins. On later coins a bird perched on a club.

Assos. (Mysia.) A griffin beneath a bunch of grapes.

Axia. (Locris.) A thunderbolt.

Brutium. Sometimes a naked warrior, the *dioscorii*, an eagle, &c.

Byzantium. A crescent and stars.

Cœne. (Island.) A griffin and a grasshopper.

Cales. (And other Campanian cities.) A cock.

Camarina. Sometimes a lizard.

Camarina. A swan in various positions, sometimes carrying a nymph.

Cardia. A heart, the fore part of a lion, and ear of barley.

Carthage. A horse's head.

Carthea. Fore part of a dog surrounded with rays, and a bee.

Carystus. A cock.

Carystus. (Eubœa.) A decorated head of a bull.

Centuripa. A bird on a ploughshare.

Ceos. (Island.) Fore part of a dog.

Chalcedon. A lyre between two olive trees.

Chalcis. A lyre.

Chalcis. An eagle with a serpent in its claws.

Chalcis. A eagle and serpent on a thunderbolt.

Chersonesus. Apollo sitting on the cortina, playing the lyre.

Chios. (Island.) A diota or amphora, assumed at a later period than the original type of the griffin.

Cnidus. (Doris.) A lion's head in profile.

Colophon. A horseman and a lyre, frequently a dog.

Coressia. A star or a bee.

Corinth. The pegasus.

Cos. (Island.) A crab and club.

Crotona. (Magna-Græcia.) A tripod.

Cumæ. (Æolia.) A bridled horse stepping.

Cydonia. A wolf suckling a child.

Cymæ. A kind of diota, or rather a jug with one handle.

Cyrene. The Suphium, a plant growing in that region.

Cyzicus. Sometimes lion's head, full face similar to the above, and on early coins the winged boar.

Dyrrachium. The gardens of Alcinous.

Eleusis. A sow.

Elis. The thunderbolt.

Epidaurus. A serpent twined round a staff.

Eretria. A bull lying down.

Erythræ. A bow, a quiver, and a club.

Faleria. The thunderbolt enriched with ornaments.

Gaulus. (Island.) A tripod.

Gnossus. (Crete.) The labyrinth and other small types.

Gortyna. Europa on the bull.

Heraclea. Hercules overcoming the lion.

Histiæa. A female figure sitting on the prow of a vessel.

Hylea or Elea. (Magna Græcia.) A lion overpowering a stag.

Ilium. Minerva with a distaff and spear.

Istrus. A eagle with a dolphin in its talons.

Lacedemonia or Sparta, capital of Laconia. The caduceus of Mercury, and sometimes a sitting Hercules leaning his left arm on a club.

Lamia. A vase surrounded with a leaf of ivy.

Larissa. A bridled horse stepping.

Larissa. Sometimes in the indented square a man overpowering a bull.

Leontini. A female figure holding two ears of corn.

Leucadia. The prow of a vessel.

Lythus. The head of a boar.

Mamertini. A naked warrior, with lance and buckler.

Massilia. (Marseilles.) A lion standing in repose, the tail coiled up.

Maronea. Bunch of grapes, the forepart of a horse.

Melos. An apple.

Messembria. A crescent.

Messena. A tripod.

Metapontum. (Magna Græcia.) An ear of wheat.

Methymna. A boar.

Myara. A tripod.

Mylassa. (Caria.) A double-headed axe, with a laurel wreath.

Mytilene. A lyre.

Naxos. A crouching figure of Silenus, holding in one hand a diota or vase, and in the other a thyrsus.

Neapolis. (And Campania in general.) A human-headed bull, crowned by a flying Victory.

Olbia. An eagle with a dolphin in its talons.

Opus. (Of Locris.) Ajax armed with a sword and shield.

Orthos. A panther.

Panormus. A horse, &c.

Paros. (Island.) A goat and a star.

Pergamus. An eagle on a thunderbolt.

Phanagoria. A bow and arrow.

Pheneus. (Arcadia.) Mercury carrying the infant Arcus.

Phocis. A bull's head, front view.

Posidonia. (Poseidon or Neptune.)

Preaesus. (Ditto.) A bull.

Pylos. (Messenia.) A trident.

Samos. (Island, by some attributed to Sardis of Lydia.)

A lion's head, full face, and often on the reverse a bull's head.

Sardinia. Three ears of corn on one stalk.

Segesta. A dog beneath a globe.

Seleucia. The thunderbolt, with flames projecting from each side.

Sidon. Hercules bending his bow.

Sigeum. (Like Athens.) An owl, sometimes side and sometimes full face.

Sinope. An eagle holding in its claws a fish.

Sycion. (Time of the Achæan league.) A chimæra, a monster formed of a lion and a stag, or some other animal, and above a dove within an olive wreath.

Syracuse. A winged sea dog, a dolphin, a quadriga, &c.

Tarentum. A youth riding a dolphin, also the cockle shell.

Tauromenium. A bull butting.

Temenos. Fortune with her attributes.

Tenedos. A double-headed axe, &c., &c.

Tenos. (Cyclades.) Two dolphins and a trident.

Thasus. A branch of vine.

Thespia. A lyre with a laurel garland.

Thurium. A bull in the act of butting.

Tralles. A serpent issuing from mystic chest like the cistophorae.

Velia. A lion.

Zacynthus. Æsculapius sitting on a rock, and placing his hand on a serpent.

Zancle. A dolphin, or sometimes a sickle, or, as some describe it, the semi-circular part of a maritime town.

It may not be inopportune to tender a word of advice to those who may desire to collect Greek or, in fact, any rare coins and medals. Never attempt to acquire a large collection at once. On the contrary, become the possessor at first of a single piece; examine it closely, and get to know thoroughly the city where it was minted and the date of issue; become well acquainted with the legend, obverse and reverse, and if

there are apparently two of the same type, see if there is not a minute difference either in the design or inscription; thus, gradually, an amount of numismatic knowledge will be acquired, which will greatly smooth the path of the student besides laying the foundation of the love for true art, and enabling him to appreciate the sublime and beautiful in Architecture, Sculpture, and Painting. In fact, nothing elevates and refines society so much as the development of the taste for the classic monuments of the past.

The writer of this paper was called upon at a very short notice to prepare a memoir for the Society, and must, therefore claim an excuse for any shortcomings. If he had had sufficient time afforded him, to have written in detail on the Greek coinage, he believes he would have done the subject ampler justice.

Like most of the fine arts, we, who prate of progress, are only just emerging from a long obscurity in all true art. We have no edifices like the Parthenon, no sculpture like that of Phidias, and no coinage like that of Hellas. After a long mediæval darkness in coinage, we are only just awaking to the true and beautiful in that department. In some of the Thaler coinage of Germany and the France of the Republic we see a little of the force of Grecian art revivifying. On the classic shores of Hellas, however, it seems as if their gods and goddesses had forsaken them; and if we take a specimen of their modern coinage and compare it with the marvellous productions of yore, we must say with the poet—

> "Such is the aspect of this shore,
> Tis Greece, but living Greece no more!
> So coldly sweet, so deadly fair,
> We start, for soul is wanting there."

A LITTORAL SURVEY OF THE PORT OF LIVERPOOL;

BEING A SURVEY AND ACCOUNT OF THE ENCROACHMENTS AND EMBANKMENTS, WITH OTHER MEMORANDA RELATIVE TO THE STRAND OF THE MERSEY, COMMENCING AT HILBRE ISLAND, SITUATE IN THE ENTRANCE OF THE RIVER DEE, AND EXTENDING OVER EACH TOWNSHIP IN THE COUNTY OF CHESTER TO FRODSHAM AND WARRINGTON BRIDGES, AND THENCE OVER EACH TOWNSHIP IN THE COUNTY OF LANCASTER TO FORMBY POINT. BY EDWARD EYES.

With Additions and Emendations from the Original Note Books,

By Joseph Boult, F.R.I.B.A.

(READ DECEMBER 16TH, 1869.)

The Port of Liverpool extends from the Red Stones in Hoylake to the foot of the Ribble Water in a direct line northernly, and so upon the south side of the said river easternly, and thence all over the river Mersey to Warrington and Frodsham bridges. In Mr. Eyes's survey the only omission is the strand from Formby Point to Hesketh Bank. No authentic record of any of the boundaries of the port exists prior to 1680; and there can be little doubt that these extensive limits were primarily an usurpation, which acquired a legal status by lapse of time, there not being any authority equal to resisting the encroachment; the northern and southern limits of the seaward boundary being the ports of Preston and Chester.

In 1828 the attention of the Duchy of Lancaster was

directed to the value of the strand of the Mersey, and it was in contemplation to adopt legal proceedings for enforcing the rights of the Duchy in the strand. With this object Mr. Edward Eyes, (members of whose family practised in this town as surveyors for, I think, five generations,) was employed to make the survey of the strand; and in 1839, when the Town Council applied to Parliament for an act to secure the conservancy of the river, this survey was repeated. The results are embodied in the following report, which is taken from the office copy, lent to me for the purpose in 1857 by Mr. Eyes's son, then of Hough House, near Nantwich, now deceased, who was also named Edward, and had been a surveyor. To the various sections of the report are appended extracts from the note books used on both surveys, which were also lent to me by Mr. Eyes, Jun. Those taken on the survey for the Duchy are dated 1828; and those for the Conservancy, 1839.

In 1855-6, when engaged on the Mersey Inquiry Committee of the British Association, I had access, through Admiral Beechey, to a copy of one of these surveys in the office of the Board of Trade. It was then in a dilapidated state; but it had been a valuable document, as the description of each township was accompanied by a map shewing the several properties described in the report. I have not been able to learn if the Town Council or Dock Board possess a copy: at the date last mentioned, when the Council permitted me to have access to all their documents which would assist in the inquiry, a copy was not forthcoming. If included in the published Proceedings of this Society, the information embodied in the report will be preserved in a permanent and accessible form; and on various occasions may prove of considerable value not only in scientific inquiry but also to the owners of the property referred to in this document. I believe the transcript was made correctly, and

therefore give it *verbatim*; apparent omissions being enclosed in brackets, and errors corrected in marginal notes.

The instructions from the Duchy of Lancaster were communicated to Mr. Eyes by Mr. L. A. Loudham, the legal adviser to the Duchy, in a letter dated 30th June, 1828. The following is an extract from a previous letter dated 4th June.

"It is not the intention of the officers of the Duchy to "commence proceedings respecting the strand of the river "within the manor of Liverpool, but it may become a question "whether the Corporation, as lords of the manor, have not "wrongfully possessed themselves of part of the bed of the "river, under the idea that it was strand. Our immediate "and principal attention is directed to the strand and bed of "the river within Toxteth Park, to ascertain the rights of "the Duchy thereto. We shall want also to know how the "strand of the river in all the other manors on the Lancashire "side is circumstanced, that we may take care no further "encroachments are committed thereon; and may get the "best information as to the value thereof, and the rights of "the Duchy thereto."

The instructions are as follows:—

"The following are the points upon which you will please "to obtain the best information in your power.

1. "The changes in the low water mark, the nature thereof, "and the periods when the same took place.
2. "The same as to the high water mark.
3. "To what extent gravel, seaweed, and seasand have been "got between H. and L. W. M.; by whom, under "what circumstances, and at what period.
4. "Whether there have been any and what enclosures and "embankments against the sea, and enjoyment thereof, "and by whom.
5. "What wrecks on the strand, and by whom taken.
6. "What evidence of a manor, and whether any and what

"courts have been held, and, particularly, if any "notice has been taken by such courts of encroach- "ments or nuisances on the strand or bed of the river.

7. "What rights of fishery, and by whom; and if Royal "fish have been taken, and by whom.

8. Whether any and what perambulations of the manor or "township."

"And the best evidence or information as to traditions and "reputation of the rights over the strand and bed of the "river.

"You will be pleased also to notice all other circumstances "which may come to your knowledge, which may tend to "throw any light upon the claims of the Duchy to the strand "and bed of the river."

The Conservancy Act, for the better preserving the navigation of the River Mersey was not obtained until June, 1842; it provides, *inter alia*, for the appointment of an Acting Conservator who is to report to the Commissioners upon the state of the navigation, specifying all nuisances, impediments, and encroachments; and, also, that after 1st July following, no quay, wharf, jetty, breastwork, or embankment shall be constructed in the bed or on the shores of the Mersey below high water of a tide rising 21 feet above the Old Dock Sill, without two months' notice to the Acting Conservator. The Commissioners are, the First Lord of the Admiralty, the Chancellor of the Duchy of Lancaster, and the Chief Commissioner of Woods and Forests.

County of Chester.

Hilbre Island, Parish of St. Oswald, Chester.

This island lies at the south-western extremity of the county of Chester, on the east side of the entrance into the river Dee, and about three-quarters of a mile from the ridge of

rocks situate in the township of Little Meols, called the "Red Stones." It is held by the Trustees of the Docks at Liverpool, under a lease from the Very Reverend the Dean and Chapter of the Cathedral Church, Chester, and principally occupied as a station for beacons and land-marks.

[The Coroner of Chester holds inquests on the island. 1839.]

Little Meols Township, Parish of West Kirby.

This township is situated at the north-west angle of the County of Chester, in the Hundred of Wirral, and it is from the rocks there called the "Red Stones" that the notes and observations following commence.

The coast here opens to that part of the estuary or bay of Liverpool called Hoylake, and from its situation is subject to the usual effects of storm and tide-waters, to which such exposed localities are liable. The "Red Stones" (rocks, so called, which extend to a considerable distance from high water) serve as natural barriers and defences against the incursions of the sea, and greatly protect the shores in their vicinity, otherwise the destruction of land would be much more than now appears, although it is perceptible that each year large quantities are swept away. This is most apparent about the Royal Hotel, and this devastation seems regularly progressing.

* Lord John Thomas Stanley is the owner of all the land on the edge of the sea and Lord of the Manor, but he does not hold any courts, nor does he exercise any rights or authority upon the strand except the preventing persons cutting rock.

[The line of H. W. is progressively encroaching upon the banks, particularly in front of the Hoylake Hotel. The line of L. W. is about the usual distance. Wrecks are claimed by Mr. Glegg—see note and his letter.† Lord Stanley allows the stone to be taken from the Red Stones for his own estate, but for no other purpose. 1839.]

* This should be Sir John Thomas Stanley, Bart., created Lord Stanley of Alderley.

† The note and letter were not with the original MS.

The following is the state of occupancy, &c., of lands abutting the river, commencing at the Red Stones :—

Lord John Thomas Stanley. Land and sandhills.

Open to the beach.

The Royal Hotel. Land and buildings attached, at present unoccupied.

Fences have been built at high water, and at different periods renewed and set back in consequence of the encroachments of the sea. [Land much encroached upon by the tide, but not for the last five years. 1839.]

Private road.

Two dwelling houses and land, in the occupation of Mr. Hugh Williams and Mr. John Barton.

A fence built at high water mark. [These lands are held by Messrs. Williams and Barton under a lease for the remainder of a term of 80 years.]

Vacant land and sandhills.

Vacant land intended to be built upon.

A fence built at high water mark.

Public road called " King's gap."

Lord John Thomas Stanley. Land and sandhills.

Life-boat house.

Lower Lighthouse, and land in lease to the Trustees of the Docks.

Boat house built upon the shore.

[The constable is appointed by the magistrates at Petty Sessions held at Parkgate.

Tenants compelled to plant star grass. 1839.]

Hoose Township, Extra Parochial.

This, like the preceding township, is open to the sea, and similarly exposed to the effect of tide waters, though perhaps not quite so seriously, as it is partly protected by the sand bank called East Hoyle. No defences have been erected, except a small enclosure in front of the Custom House, &c.

The rest of the shore is open to the strand.

The tide marks do not undergo any material change. Mrs. Betty Swainson claims the manorial right, but she has not held any court, nor does she appear to have exercised any authority on the strand.

Some years ago, when the late Mr. Swainson took possession of this property, he held one court.

[The lands in front not much, if any, affected by tides. L. W. same as adjoining township. No authority exercised upon the shore, nor are there any embankments, &c. 1839.]

The following are the proprietors of lands abutting the shore :—

The Crown, or Woods and Forests, on which is erected the Custom House, and they have a road also to the shore.

Partly enclosed by a wall at high water mark; the rest open to the beach.

Mrs. Betty Swainson. Land, dwelling-house, gardens, and sandhills.

[Open to the beach. 1839.]

Proprietors of lands in the township, sandhills, &c.

Great Meols Township, Parish of West Kirby.

This township, like the two preceding, is situate in that part of Liverpool Bay called Hoylake, and being immediately in the direction of the flood-tide and open to the sea, is subject to even greater devastation than they are—the waters at all times acting and progressively encroaching upon the shore, sweeping away each year large portions of it. This is seen more particularly about the west end of the embankment, where, from the impetus of the principal stream and the form of coast, the banks there seem more susceptible of injury than in other places.

In the centre of the township, and not far from the shore, is Leasowe Lighthouse, built some years ago to replace one which appears, from a survey in my possession, to have stood in the year 1771 within the line of high water, since which

date, so rapid has been the destruction of coast, that the site is now even beyond the line of low water; and fear being entertained that the sea might ultimately break into the lands adjoining, which are under the level of the ordinary spring tides, the Corporation of Liverpool and the landowners of townships near, likely to be inundated, about ten years ago obtained the consent of Parliament to erect and build a permanent and stone mound in front of this and the adjoining township of Wallasey to prevent such a catastrophe. Its completion has prevented the destruction of nearly three thousand acres, which would have been covered with tide water had such a breach been effected.

Both the lines of high and low water progress regularly in shore. The manorial right is claimed by Mr. Archibald Worthington; but he does not hold a court, nor does he exercise any authority on the strand. The land abutting the shore being open and unenclosed, is occupied by the proprietors in common.

[In the township of Great Meols, west of the embankment, twenty to thirty yards wide gone in ten or twelve years last past, particularly about the west end of the embankment.

William Bennett is appointed by Mr. Glegg to look after all wrecks, &c., and his jurisdiction includes Little Meols, Hoose, Great Meols, Wallasey, under a grant made in 1309, of all royalties. 1839. [This was a grant of what is now called the hundred of Caldy. J. B. 1857.]

Reported that the sandhills are encroached upon each year five or six yards in width the whole front, and have been doing so for several years; this appears particularly the case about the west end of the embankment, which was erected under the sanction of Parliament to protect the lower lands. Marsh formerly existed on the outside of the embankment, which is now swept away. The land inside of the embankment is in common (?) to the whole township. 1839.]

Wallasey Township, Parish of Wallasey.

This township also lies open to the estuary in Liverpool Bay and near to the entrance into the Mersey—the western

part, adjoining to Great Meols, being equally exposed with it to the inroad of the sea, is protected by a continuation of the line of embankment before mentioned, and the remainder of its point (? front,) by a barrier of lofty sandhills, the base of which, however, being gradually undermined and giving way. The land is much encroached upon. No erections have been made upon the strand except the said embankment.

The tide ebbs to a considerable distance, but no particular change takes place at the line of low water.

Sir John Tobin, Knight, and Robert Vyner, Esq., jointly claim the manorial right, but they do not hold any court, nor have they exercised any authority on the strand.

John Baskervyle Glegg, Esq., by a grant from the Crown in 1309, (with other powers therein named,) claims jurisdiction over wrecked property on the shores of this township, Great and Little Meols and Hoose, and holds courts regularly in right thereof.

[The whole front of that part of the shore left for the protection of the inner lands much encroached upon by the tide. The 100 yards lot, and Sir Edward Cust's Bart.,* are all the lands to the sea. Sir Edward has embanked or enclosed the greater part of his front. 1839.]

The following are proprietors of lands fronting the sea :—

Sir Edward Cust, Bart. Leasowe Castle, Gardens and Land, &c.

These are defended from the sea by the mound alluded to.

Sandhills.

Sandhills belonging to the proprietors of lands in the township, intended as a bulwark or barrier against the encroachment of the sea.

[See the Wallasey Inclosure Act.]

Liscard Township, Parish of Wallasey.

This township is situated at the entrance into the river Mersey, partly fronting it and partly to the estuary; the

* General the Hon. Sir Edward Cust, K.C.H., is not a Baronet.

greater length of the sea front is protected by rocky promontories called the Red Noses, and about the angle or front, (? point,) front to the river by lofty sandhills.

The general lines of high and low water have undergone little change until within the last thirty years, the progressive encroachments on the bed of the river of the works on the opposite shore with other causes, tending to throw the current on this side, have gradually undermined the steep clay banks abutting the river, at the southern part of the township, and except where substantial walls have been erected, this wasting of the land has continued, though with less injurious effects than formerly.

The late J. Penkett, Esq., claimed to be Lord of the Manor, or reputed Manor, and in the division of the common lands this claim was admitted, and a portion allotted in right of it.

No court has ever been held by him, nor has he been paid for any enclosure on the strand, nor does he claim toll for anchorage, nor have any perambulations of the boundaries taken place.

[Sand and gravel taken by any one without asking permission. No wrecks.

The high water mark between Sea Bank and Egremont Hotel has gradually encroached upon the lands in consequence of the precipitancy of the banks, and the works on the opposite shore: low water mark has undergone little change. (1839.)

Mr. Penkett bought the manor from the late Mr. Hough about the year 1804 or 5. Certain lands in Liscard and Poulton are said to pay quit rents to Halton; but I cannot learn who are the parties that do. E. E., 1839.

The general lines of high and low water have undergone little change within the last thirty years. The progressive encroachment on the bed of the river by the works on the opposite shore, with other causes tending to throw the currents on this side, have gradually undermined the steep clay banks abutting on the river, which have fallen, and except where permanent walls have been erected, this wasting of the land has continued, though with less injurious effect than formerly.]

The following are the names of the several proprietors :—

John Astley Marsden and John North. Land.

William Rowson. House and gardens.

Peter Greenall. House and lands.

John Tomkinson. Two houses and land.

William Rowson. Land.

Trustees of the late James Atherton. Land.

Reginald Hargreaves. House and land.

The Rev. Dr. Thomas Raffles. House and land.

The Exors. of the late Adam Dugdale. House and land.

William Rowson. House and land.

Ditto. Land.

William Hadfield. House and land.

Richard Barker. House and land.

William Rowson. House and land.

Private road.

Trustees of the late James Atherton. Land.

Ditto. Baths, &c.

Enclosed about the line of high water.

Trustees of the late James Atherton. Land.

Private road.

New Brighton Building Co. Eight houses and land.

William Rowson. Land.

Trustees of the late James Atherton. Cottages and timber yard.

Ditto. Land.

The Trustees of the Docks have erected a lighthouse at the line of low water.

William Rowson. Land.

Government have also built a fort on the strand.

Private road.

Trustees of the late James Atherton. Land.

A pier or stage of open wood framing erected for the accommodation of passengers landing from vessels.

The late John Penkett. Land.

Private road.

The late John Addison. House and Land.

Rev. Rowland Egerton Warburton. House and Gardens.

Piece of land left under the "Enclosure Act" for the use of the township, from which several proprietors take stone or marl.

James Logan. House and land.

John Davies or Mr. John Kilshaw. Hotel, house and land.

An enclosure or embankment has been made in front of the Hotel, and the foundation of a wall to enclose a further portion of the strand in front of the land to the west of it was laid some years ago by Mr. Davies, [under the sanction and with the approbation of the officers of the Duchy. 1839 (?)]

Public road to Wallasey, &c.

Trustees of the Docks. Land on which is the life-boat house, and over which they are making a private road to the powder magazines.

Land left by the Commissioners for enclosing the waste lands for the benefit and accommodation of the proprietors of the property there abutting the river, the following parties being now entitled to it:—James Leay, William Whittle, Peter Bennett, Ann Dean, and the Corporation of Liverpool.

The assignees of William Bartley. Land and houses.

Seven or eight years ago, Mr. Bartley erected a wall in front of his land, and enclosed 16 or 18 yards in width from the strand.

The late John Penkett. Land.

About twelve years ago Mr. Penkett took in about 16 yards in width from the strand, part only of his frontage to the river, which he conceived he had a right to do as Lord of the Manor.

John Davies, in right of his wife. Cottage and land.

About fourteen years ago Mr. Davies took in part of the strand.

Cottages belonging to the late John Penkett.

Strand enclosed in front of these cottages by Mr. Penkett about thirty years since.

An embankment and enclosure from the strand to communicate with a new road lately made by Mr. Penkett's exors.

The late John Penkett. House and gardens called "Sea "Bank."

In front thereof part of the strand was taken in about twenty-five years ago.

The late John Penkett. Land.

Within the last three years a new road to connect with the shore has been made, and a considerable portion of the strand enclosed to form the inclines.

Lands formerly belonging to John Askew, now to the assignees of his estate, Mr. John Lockett and another.

In front of which, and on part of the strand, he has formed a road with inclines to communicate with the shore, under the sanction and with the consent of the Woods and Forests, [for which an annual rent is paid. 1839.]

The Rev. James Mainwaring, in whose land is a private road to the shore.

Egremont Ferry Company or William Houldsworth. Land, hotel premises and road.

The landing pier, a slip, and embankment, erected a few years ago by Mr. John Askew on the strand, enclosed with the privity and consent of the Woods and Forests, for which permission an annual rent of £10 is payable on a lease of 31 years, commencing in 1835.

Poulton-cum-Seacombe Township, Parish of Wallasey.

The lines of high and low water mark do not materially change; since the year 1815 or thereabouts the tides have made considerable inroads upon the lands about Seacombe point, which being composed of precipitous clay banks are easily affected; latterly the proprietors of lands, &c., in that vicinity have prevented further encroachments or injury, by the erection of efficient walls in front of their respective properties. The shore in Wallasey Pool remains in its natural state.

Richard Smith, Esq., is Lord of the Manor, or reputed

manor, and in acknowledgment of his right is paid for vessels anchoring, and for sand or gravel taken from the strand. Claims the shore between high and low water mark, holds Courts within the last two or three and twenty years, and received in the allotment of the waste lands in the township, a certain portion in right of this lordship [= 5-6ths.]

Mr. Mainwaring was originally a joint proprietor of the manor, but he thought so little of its value that it is understood he waived his right. [His interest 1-6th.]

[Little change has taken place in the lines of high and low water between Egremont Hotel and Seacombe point; but the point has been much encroached upon and washed away within the last twenty or twenty-five years. The walls built to the northward of Seacombe point are at the line of high water. (1839.)]

Names of the proprietors of lands fronting the river :—

Egremont Ferry Company, or Wm. Houldsworth. Land.

The Rev. James Mainwaring.

No alteration or fence on the strand.

Private road.

This place is called Codling Gap.

Sir John Tobin. Houses and land.

[A permanent wall built at high water mark. 1839.]

John Wilson. Four houses and gardens.

Permanent walls built at high water mark.

Thomas Lowry. Land.

Private road.

Richard Smith, Esq. Land.

These lands are open to the Beach.

Thomas Lowry. Land.

David Cannon. Land.

Thomas Affleck. Land.

[Wall at high water mark. 1839.]

Thomas Lowry. Two houses and land.

Walls built at high water mark.

Thomas Affleck. Houses, &c.

[Ditto. 1839.]

John Beard. Garden, &c.

S. Hitchmough. House.

The late Mr. Cummins. House.

A permanent wall built on the strand, at or about high water mark, in front of these properties.

Joseph Willey. Five houses.

Joseph Robinson Pim.

John Clarke and others. Land.

Richard Smith, Esq. Bowling green, &c.

Thomas Parry. House.

Richard Smith, Esq. Two houses.

Thomas Parry. Two houses.

A permanent wall built on the strand, at or about high water mark, in front of these properties.

Elizabeth Evans. House.

Joseph Evans. House.

[A permanent and substantial wall built at line of high water. E. E., note book. 1839.]

Richard Smith, Esq. Parry's Hotel.

A landing pier or slip, with quays erected on the strand.

Public road to Poulton, Liscard, &c.

Richard Smith, of Eastham. Six houses and courts.

Two of these houses said to be the original ferry.

Private road.

Thomas Parry. Two houses, called Red House.

Richard Smith, Esq. Garden.

Peggy Smith. House and garden.

Private road.

Richard Mercer. Two houses and gardens.

In front of these properties is an embankment and enclosure from the strand, averaging about 15 yards in width, made at the joint expense of the parties, and used as an esplanade.

William Healing. Land.

Samuel Rawlins. Four houses.

Public road, Whiting or Wheatland lane.

John Rigby. Two houses and garden.

A few years ago the then owner of this property was about to erect baths on the strand, but it was objected to by Mr. Smith, and the walls were by him thrown down.

Richard Smith, Esq. Land.

The shore remains in its natural state.

Messrs. John Mawdsley and Smith, Smalt works. House and garden.

Messrs. Mawdsley and Smith are making a considerable embankment and enclosure in front of these premises, and also excavating a channel for vessels to approach their works.

These gentlemen purchased the strand from Mr. Smith, whose agent defined the boundaries to which they are now enclosing.

The Exors. of the late Mr. Quirk. Land.

Richard Smith, Esq. Land.

Mr. White. Land.

The public have a right of road in front of these properties to Whiting Lane and to Seacombe Hotel.

Public road leading to Poulton Road.

Creek, called Seacombe Dale.

Corporation of Liverpool. Copper works and land.

Messrs. Clough and Galan. Vitriol works and land.

Creek.

Richard Smith, Esq. Land.

The Rev. James Mainwaring. Land.

Proprietors of land in the Township, Waste, and landing place.

Richard Smith, Esq. Land and limekiln.

The lands are open to the Pool.

The Rev. James Mainwaring. Land.

Trustees of Wallasey School. Land.

The Rev. James Mainwaring. Land.

Robert Vyner, Esq. Land.

Landing quay and road.

Robert Vyner, Esq. Land.
Road.
Robert Vyner, Esq. Land.

These lands are open to the Pool.

About twenty years ago Mr. Vyner erected an embankment across the Pool here, which was taken down about six years since, and the tide now flows half a mile further, that is to Warrington's Bridge.

Bidston-cum-Ford Township, Parish of Bidston.

The land in this township on the edge of Wallasey Pool belongs to Robert Vyner, Esq., who is also Lord of the Manor, and for which he holds courts. These lands have a mound or embankment to prevent the tidal water flowing beyond as formerly. They covered 3,000 acres in this and the adjoining township, called Wallasey Leasowe.

Some years ago Mr. Vyner erected an embankment or roadway across the Pool, connecting his lands in Bidston with Poulton-cum-Seacombe; but in consequence of objections made that it interfered with the free action of the tide, it was taken down, and it does not appear that he has attempted the exercise of any other right on the strand.

Township of Birkenhead—Extra Parochial.

[The Abbey lands extending over the whole. 1839.]

The shore abutting the river being principally composed of rock, the lines of high and low water mark are not subject to any particular change; where it is otherwise, that is in Wallasey and Birket Pool, the encroachments and embankments have caused whatever alterations may have taken place. The several projections upon the strand consist of the ancient pier or landing slip at Woodside, the only one in the township until about twenty years ago, when the late Mr. Hetherington and others erected on the rocks at Birket Pool a substantial landing pier for the accommodation of the public; subsequently upon the site where it is generally understood the

monks plied, extensive works have been erected by the Monks Ferry Company; Mr. Price has also considerably enlarged the landing pier at Woodside, [enclosing a considerable portion of strand.]

In Wallasey Pool at Bridge End a new road has lately been constructed by the Corporation of Liverpool, Mr. Price, and others, and a considerable portion of strand embanked in forming the same. The Corporation have also in a variety of places encroached upon the strand in Wallasey Pool. Several encroachments have been and are now making in the upper part of Birket Pool (outside of the public road), particularly by Mr. Hugh Williams and Birkenhead and Chester Railway Company.

[Note.—When Mr. Price sells the detached lands near Birkenhead, he *measures* the Priory and Manor, comprising all the lands fronting the river, and up the pool to Bidston from *high water mark*.]

Francis Richard Price, Esq., is the Lord of the Manor, holds courts regularly, occasionally perambulates the boundaries, disposes of the strand between high and low water mark, claims anchorage for vessels lying upon the beach, [4d. charged for each vessel (1839), Hill, collector], restricts persons cutting rock on the strand (except for public roads), but permits sand and gravel to be taken, [claims fish.]

[It is said that the tide formerly flowed into Birket Pool upwards of one mile. About the year 1806 the late Mr. Chamberlain and the trustees of the turnpike road made the dam and road across the Pool. The graving dock in the lower pool was made about the year 1820, and the (*sic*) *proposed* wet dock was making about the year '26. The strand on the south side of Tranmere slip formerly in part marsh, now mud. Between Tranmere Ferry and the Rock House, in the space of fifty or sixty years, at least 5 or 6 acres washed away from the land there—evidence of old Peter Bennett and Saml. Rogers, 1839. Wm. Francis recollects a green sod the now strand. Mr. White who owned the Rock Ferry has a special claim in the Act obtained by him to enlarge the landing pier. See the Act itself. (1839.) The tide now excluded from that part of Gillbrook passing through Mr. Pim's land by a dam or embankment raised 5 or 6 feet above the highest tides. 1839.]

Proprietors of lands in the Township of Birkenhead :—

Sir John Tobin. Land.

F. R. Price, Esq. Crane and railway.

The Corporation of Liverpool. Land on which is erected a boiler yard, limekiln, patent slip and shipbuilding yard, all of which encroach more or less on the strand of the Pool.

Gill Brook discharges itself over this land, into which (the tide formerly flowed), but is now in a great measure excluded.

The Corporation of Liverpool. Land between the old embankment (Bridge End) and a new road and embankment lately constructed by Mr. Price, the Corporation, and others.

The land lately abstracted from the Pool contains, perhaps, about 5,000 or 6,000 square yards, independently of what was taken at a former period by Mr. Price.

These properties front Wallasey Pool.

Public road leading from Bridge End on the shore to Woodside Ferry.

Corporation of Liverpool. Land.

Sir Richard Pulston, Bart., or F. R. Price, Esq. House and grounds.

The public have a right of road on the strand, between the ferry and Bridge End, in front of these properties.

F. R. Price, Esq. Woodside landing pier, stone yard, coal yard, two hotels, and dwelling houses.

There was a small slip or landing place formerly here which is now taken away, and in lieu thereof the present quays, pier, and other permanent erections have been made on the strand.

The Corporation of Liverpool. Land.

A wall has been built on this land rather below the line of high water.

Mr. Ravenscroft. House and garden.

James McDonald. House and garden.

A permanent wall built below the line of high water in front of these properties.

The late Mr. Harrison. House and garden.

A small part of the strand enclosed.

Monks Ferry Co. Hotel. Landing pier, road, and garden.
A considerable enclosure from the strand by the proprietors of the ferry for piers, quays, coal yards, &c.

F. R. Price, Esq. Land.

The late Wm. Hetherington and others. Land.
No change on the strand opposite.

The late Jonathan Grindrod. House and garden.
The wall abutting the river built about the line of high water.

The late Wm. Hetherington and others.

Birkenhead Hotel, landing pier, dock, bowling-green, &c.
The pier, coal yard, road, &c., are part of the strand.

The following are fronting Birket or Tranmere Pool:—

The late Thomas Pegram. Two houses and gardens.
Walls built about the line of high water, or say rather below.

The late Wm. Hetherington. House and garden.
Part of the strand enclosed.

Birkenhead and Chester Railway Co. Land.
Open to the beach.

Hugh Williams. Timber yard and workshops.
Built principally upon the strand of the pool.

Public road made on the strand.

Hugh Williams. Workshops and timber yard.
Built principally upon the strand of the pool.

Hugh Williams. Flag and stone yard.
Enclosed within the last twelve months from the pool.

Birket or Tranmere Pool.

Township of Tranmere, Parish of Bebington.

The lands adjoining the shore have been, and are now (except were prevented by the walls lately erected) constantly encroached upon by the tides at high water.

The line of low water is not subject to much deviation.

Birket Pool, the northern boundary of this township, into which the tide flowed about forty years ago nearly one mile, has since then had a dam erected at that part over which the

public highway (to which considerable additions were made in 1820) from Woodside to Chester is carried, and the tidal waters are consequently excluded, except what may pass through a small culvert under the road.

A considerable portion of the strand, about the entrance to the pool, has of late years been enclosed under agreement, and with the consent of the late Daniel Orred, Esq.

George Orred, Esq., claims the manorial rights, but he does not hold any court, nor has he exercised any authority on the strand except the not permitting any rock, sand, or gravel to be taken, and the sale above stated.

[Mr. Orred holds, under purchase from Lord Cholmondeley. Mr. Bell recollects stepping-stones on the beach across the pool before the bridge or embankment, which was made about forty years ago. 1839.

Having no fence, high water mark progressing inland. 1839.]

Landowners' Names, Tranmere Township :—

Birket or Tranmere Pool.

Mr. Chamberlain. Shipbuilding yard.

Mr. Chamberlain. Coal yard.

Mr. Chamberlain. Shipbuilding yard.

Mr. Chamberlain. Strand lately embanked, and forming into land.

Mr. Chamberlain. Slip or landing pier.

These enclosed from the strand by the late Mr. Chamberlain.

Public road on the shore.

Mr. Chamberlain. Land.

The tide encroaching on this land.

Private road.

Mr. Chamberlain. Land and cottage.

Wall built in front about the late line of high water.

George Orred, Esq. Land.

Mr. French. Land.

Lately walled in. [In front of this land, now strand, was *formerly* grass sod. 1839.]

George Orred, Esq. Land, lime kilns, &c.

Having no river fence, the tide is constantly encroaching.

Public road.

Mr. Moorcroft. Land.

The Exors. of the late Samuel Lacon. Land.

Wall lately built and part of the strand enclosed.

The public have a right of way upon the strand in front of these.

Township of Higher Bebington, Parish of Bebington.

The land abutting the river in its whole extent is protected from the effects of the tidal waters by a substantial stone wall, built generally about the line of high water.

The low-water mark undergoes little alteration.

About the year 1805 the late Mr. White obtained an Act of Parliament to improve the passage across the river from Liverpool; and, subsequently, Mr. Morecroft, who purchased from Mr. White, erected at a considerable expense the landing slip, quays, and other works connected with the ferry, principally upon the strand, since which he has disposed of his interest in the same, the hotel, and the lands adjoining, to the Royal Rock Ferry Company.

George Orred and Thomas Morecroft, Esquires, each claim to be lord of the manor, but it appears Mr. Morecroft only has exercised authority as such on the strand. No courts are held.

[Mr. Orred claims under purchase from Lord Cholmondeley. About the year 1810 the late Mr. White, who claimed the lordship and appointed a gamekeeper in right of it, was proceeded against by an action, at the suit of Mr. Orred, who gained the cause: since then no further claim set up by him. 1839.

In Mr. White's act for establishing a ferry (June, 1805) and improving the passage from Liverpool to the Rock, in the preamble he claims to be Lord of the Manor, powers to erect a pier, &c., for landing passengers, &c., and for all landing within 200 yards each side of the pier, every person 1d., horse 3d., carriage 6d., bull 2d., sheep 1d.

Mr. Morecroft claims the lordship under purchase from Mr. White.

Tolls to cease if the pier is not kept in repair. This act does not give Mr. White powers to erect slips, &c., if he had not before enjoyed them. 1839.

When Mr. Morecroft sold this land to the Royal Rock Ferry Company he conveyed the whole of his interest on the shore to them.

It appears that the late Daniel Orred, Esq., and the late Joseph White, Esq., each having purchased large portions of the township, which formerly belonged to the Cholmondeleys of Vale Royal, gave disputations to the manor, and I therefore suppose it be held jointly.

The Royal Rock Park Company own the baths and esplanade, which are erected upon the strand.

See extract of the title to Mr. Morecroft, in which the manor or reputed manor is conveyed to him.]

Names of the Owners of Land in Higher Bebington :—

Public road to the strand.

The Royal Rock Ferry Company. Landing pier, coal yard, &c.

Erected on the strand under an Act of Parliament obtained by Mr. White in 1805.

Public road to the strand.

The Royal Rock Park Company. Esplanade, baths, plantation, &c.

Partly erected upon the strand.

Richard Watson Barton. Continuation of the Esplanade.

About the line of high water.

Road to Chester, &c.

The public have right of way on the strand in front of these properties.

Richard Watson Barton. Land.

Lower Bebington Township, Parish of Bebington.

The shore in this township is in its natural state for nearly its whole front to the river.

About the ferry some trifling enclosures have been made. The lines of high and low water mark undergo little alteration.

Richard Green, Esq., claims the manorial rights, and courts are held, but he does not exercise any authority on the strand of the river.

Proprietors of Land in Lower Bebington:—

William Lake. Land, coal yard, and ancient pier or landing place.

New Ferry.

Public road to Chester, &c.

Exors. of the late John Fitchett. Three houses, &c.

Ralph Pearson. House, &c.

Exors. of the late John Fitchett. Five houses, &c.

An Esplanade erected partly in front of these properties.

Lady Murray and Mrs. Backhouse. Land.

Sir Thomas Stanley Massey Stanley, Bart. Land.

Richard Green, Esq. Land.

These lands are open to the river.

Bromborough Pool.

Bromborough Township, Parish of Bromborough.

All the land on the edge of the river belongs to the Rev. James Mainwaring, that near the mouth of the pool and extending some seven or eight hundred yards south suffers much from the tides breaking upon and destroying it; the remainder of the shore being composed of rock is little affected. No embankment or enclosure has been made on the strand.

The tide flows up the pool beyond the mill on the old road from the lower Ferries to Chester, the adjoining lands are protected by cops or embankments, over which the tidal waters seldom break; the low water mark is subject to very little alteration.

The Rev. James Mainwaring is the Lord of the Manor, but does not exercise any authority on the strand.

Courts are held [at Bebington. 1839.(?)]

[Note.—That in the year 1833 a new road to Chester and a Bridge were erected over the pool, but they do not obstruct the flux or reflux of the tides. 1839.]

Eastham Township, Parish of Eastham.

The whole of the land in this township fronting the river belongs to Sir Thomas Stanley Massey Stanley, Bart., and lines of high and low water are not liable to much variation, except that the marsh land south of the ferry is much encroached upon at spring tides.

The manorial rights are in Sir Thomas, who exercises authority on the strand and holds courts regularly.

The only embankment or enclosure is the pier at the ferry.

Sir Thomas claims the exclusive right of shore, not even permitting persons to pass over it in front of his property.

Township of Hooton, Parish of Eastham.

Sir Thomas Stanley Massey Stanley, Bart., is the owner of all the land on the edge of the river in this township, is Lord of the Manor, and exercises the same authority in this as the adjoining township of Eastham.

There have not been any erections or enclosures on the strand, which remains in its natural state, nor is there any material alteration of the tidal marks.

[There are fishyards on the strand in this Township. 1839.]

Township of Netherpool, Parish of Eastham.

The shore in this township is in its natural state. The Marquis of Westminster is the owner of all the land fronting the river, and Lord of the Manor, for which courts are held.

There is some marsh land about the mouth of the pool and south of the rocks called "Pool House Rocks," which is decreasing. The channels from this place up the river are subject to great fluctuations, except that one is kept open to the Port of Ellesmere and Stanlaw Point, partly by the waters of the river Gowy.

It does not appear that any authority has been exercised by the Lord of the Manor on the strand.

[Considerable quantities of land have been washed away. 1839.]

Whitby Township, partly in the Parish of Eastham and partly in that of Stoke.

In this township is situate the Port of Ellesmere, belonging to the Proprietors of the Ellesmere and Chester Canal Co., who are erecting new and are considerably enlarging their old works by enclosing and embanking parts of the strand.

The Marquis of Westminster is Lord of the Manor, holds courts, and with his sanction the above works are progressing.

At low water, the strand (except a small channel kept open to the canal and the waters of the river Gowy) is one continued bank of sand.

There are three small chevrons in front of this township.

The following are the names of the landowners :—

Marquis of Westminster. Land.
Chester and Ellesmere Canal Co. Canal and works.
John Grace. Land.
Marquis of Westminster. Marsh land.
John Grace. Land.

Great Stanney Township, Parish of Stoke.

The land in this township near the river lying below the level of ordinary spring tides, has at various times suffered serious and great devastations, large tracts of it and adjoining districts being laid under water, as well as extensive parcels of land being absolutely swept away and annihilated ; for its better protection sod cops or mounds have been erected, particularly on the river front, over which the tide (being forced up by strong winds) only occasionally now flows.

Some years ago a considerable quantity of marsh existed outside the cop at its western boundary, which is now nearly all destroyed.*

Sir [Henry] Edward Bunbury, Bart., claims to be Lord of the Manor, but does not hold any court, nor has he exercised any right on the strand.

* The river being at neap tides, the low water mark recedes to a very considerable distance.

Stanlaw Parish, extra Parochial.

This and the township of Great Stanney, from their peculiar situations, are exposed to greater devastation and injury from the effects of tidal waters than any other district on the Mersey, as the lands generally lie below the bed of the ordinary springs. The tides flow over them and the adjoining townships, at times to a greater extent, and very large tracts near the river have been swept away and entirely lost. Sod cops or mounds have been erected in various directions to counteract the destruction and waste, so that of late years, from these and other precautions, much less damage has been done than formerly.

The whole of the river front belongs to the Marquis of Westminster, who has, recently, for the protection of the estate, erected a stone-paved embankment its entire length.

The Marquis is also Lord of the Manor, for which courts are held, but no authority appears to have been exercised on the strand.

The river Gowy, the eastern boundary, passes round Stanlaw point, and thereby opens a channel towards Whitby Locks, otherwise the low water mark is at a considerable distance, the river hereabouts being dry at neap tides.

Ince Township, Parish of Ince.

The trustees of the estate of the late Edmund Yates, Esq., are the owners of all the land on the edge of the river, and though this township is not so exposed to the effects of the tide as Great Stanney, it has, nevertheless, been subject to great inroad and devastation, the waters frequently extending over and inundating large tracts of it and adjoining districts.

The eastern boundary is a deep creek or rivulet called Howpow Gutter, running a considerable distance inland. On the margin thereof, as well as on the edge of the Mersey, from the plantation westward to the river Gowy, and also on

its banks, sod mounds or embankments have been raised to protect the inner lands over which, except with strong winds at spring tides, the waters do not pass.

The marsh between Howpow Gutter and the quay is much decreased in size, but on the east side of Stanlaw point (where it some years since existed, but was subsequently destroyed) is again forming.

The river here being dry at low water there are no channels, those caused by freshes excepted, which are consequently liable to great variation. Ten chevrons are erected for the protection of the lands abutting the river. There is also at this place an ancient ferry and pier.

The manorial rights are in the representatives of the late Mr. Yates. Courts are regularly held, at which the usual business is transacted, as appointing constables, water bailiffs, &c. They have also exercised authority on the strand in erecting a pier, jetties, &c.

[Ince township entirely protected by cops or embankments from the tide waters. 1839.]

Frodsham Township and Lordship, Parish of Frodsham.

The lands in this township and lordship, all lying below the level of ordinary spring tides, were formerly and are still subject to being overflowed, and also to great devastation and waste. Large portions of the marsh are constantly being destroyed and swept away, as well as the cops and embankments which have been erected in various directions for its protection. The limit of high water does not vary (?) unless on the occasion of strong winds throwing it up against the cops. The low water mark is subject to great fluctuations, with the exception of the channel formed by Howpow Gutter, sometimes receding almost to the opposite coast and again returning near to this shore.

The Marquis of Cholmondeley is lord of the manor, for

which courts are held regularly. No other authority appears to have been exercised in the strand than the erection of chevrons for the protection of its banks.

[The whole of the lands in this township and lordship, on the edge of the rivers Mersey and Weaver, have been and are constantly subject to great devastation. The greater part of the lands are held by a lease for lives and years from the Marquis.

The marsh belonging to the Marquis has decreased in the memory of persons now living 60 to 70 acres—per Mr. Jones, agent to the Marquis. 1839.

The whole of Frodsham marshes, and as far as the gardens in the town, were covered with tide-water about four years ago. Mr. Ashley has a stone in his garden showing to where it flowed at a period about twenty years ago. 1839.]

The following are the names of the Proprietors of Lands, &c. :—

Howpow Gutter.

[A deep creek running a considerable distance inland, embanked from Frodsham marsh, but the tides do occasionally overflow the cops or mounds. 1839.]

The Marquis of Cholmondeley.
Daniel Ashley, Esq.
The Marquis of Cholmondeley.
Daniel Ashley, Esq.
The Marquis of Cholmondeley.
Mr. Rowson.
Thomas Ashton.
William Higson.
The Marquis of Cholmondeley.
Daniel Ashley, Esq.
The Marquis of Cholmondeley.
Land called " Old Score Hatch." Query ? Owner's Name.
Mr. Rowe.
William Dykes.
Road (Alder Lane).
Thomas Ashton.

William Higson.

No marsh in front of the cop here.

Thomas Milner.

Thomas Milner.

Daniel Ashley, Esq.

The Marquis of Cholmondeley.

Daniel Ashley, Esq.

The Rev. William Whitley.

No marsh in front of the cop here.

Mr. William Hayes.

Dunce Creek.

Between this and Ince there appear to be seven chevrons.

Messrs. Wm. Pickering and Co.

All the land on the outside of the cop, from Howpow Gutter to this place, is used as a score or ley for cattle, and belongs to the Marquis of Cholmondeley.

Messrs. Wm. Pickering and Co. Salt Works.

Messrs. Wm. Pickering and Co. Cottages, gardens, &c.

The Marquis of Cholmondeley. Cottages, &c.

Messrs. Wm. Pickering and Co. Malt kiln house and land.

Thomas Acton.

[The Messrs. Pickering own the road and the strand of the river wholly in front of these properties. 1839.]

James Hugh Smith Barry, Esq., and Daniel Ashley, Esq. Warehouse and Stable.

Frodsham Bridge.

Sutton Township, Parish of Runcorn.

That portion of the land lying on the edge of the River Weaver between the boundary of the Township of Clifton and Frodsham Bridge, and within the cop or embankment, belongs to Arthur Ingram Ashton, Esq., and consists of a large corn water-power mill and reservoir for its supply, dwelling-house, counting-house, coal yard, wharf, dock, timber

and ship-building yards, land, &c., over which and large tracts in its vicinity the tide formerly flowed, but is now generally excluded by the mounds or cops, and its waters are restricted to the old course of the river, up which at springs it ascends several miles beyond this.

Mr. Ashton is Lord of the Manor, but he does not hold any court, though they were held formerly. No authority is exercised by him over the strand or river, which is here confined within a narrow channel.

One chevron appears at the north boundary of this Township.

[These erections—reservoir, flour mill, dwelling-house and outbuildings, coal yard, wharf, dock, timber and ship-building yards,—are upon land formerly overflowed, about sixty years ago. The river does not appear to make any change or deviation in its course since the last embankment was made about forty years ago. There is one chevron, but no embankment. 1839.

The meadow lands in Clifton and Sutton, formerly marsh, about Frodsham Bridge, are occasionally overflowed at spring tides and strong winds. This was the case four years ago, when a great quantity of land was under water. The chevrons in front of the marsh in Clifton and Sutton are so silted up as not to be easily discovered. 1839.]

Township of Clifton, Parish of Runcorn.

The entire of the land abutting to the River Weaver, which was formerly overflowed to a considerable extent by the waters of the Mersey, is now in a great measure protected by mounds and cops, leaving only a slip of marsh on the outside between it and the river, which is still subject to the effects of the tide.

No alteration appears to have taken place on the marsh, save that it is said to be diminishing.

Miss Orred and Mr. William Banks each claim two cowgates on the marsh in right of their estates in the Township of Weston.

The Marquis of Cholmondeley is Lord of the Manor, and

courts are held, but no authority appears to have been exercised on the strand by him.

There are six chevrons in this township, but some are so covered with silt as scarcely to be perceptible.

[The whole of the lands on the edge of the river belong to the Marquis. Nos. 1, 3, 5, being within the line of conservancy; 2, 4 on the inside of the embankment, over all of which the tide formerly flowed, and that to a great extent, previous to making the Weaver Canal, and the several works by the Trustees, in improving the navigation of the Weaver. 1839.]

Weston Township, Parish of Runcorn.

In this township are the entrance basin, docks, canal, and other works of the Commissioners of the River Weaver Navigation, erected by them under the authority of Parliament, principally below the level of high water mark, partly on the marsh meadows, and partly on the edge of the enclosed lands, and extending nearly the entire length of the river front of the township, the whole of which they have protected from the effects of the tides by a substantial wall or pier.

The marsh on the outside of the canal being within the mouth of the Weaver, is much decreased in size, and still continues to be encroached upon. The line of low water is subject to frequent change. The lordship is claimed jointly by Miss Orred and Mr. William Banks, but neither have exercised authority, or do they hold any court.

There appear to be several chevrons in front of this township.

[The Commissioners of the River Weaver own the land from the Township of Clifton to the point of Messrs. Johnson's works, which are enclosed from the river by a stone paved slope, and protected by three or four chevrons, part only of which appear being silted up. 1839.

There is no marsh land now on the outside of the wall from Weston Lock to about No. 18 on the plan, the tide flowing up to it. The channels about the entrance to the Weaver, in front of the canal, subject to great changes. 1839.]

The following are the names of those proprietors whose lands formerly abutted the river:—

Ann Orred.

William Banks.

Ann Orred.

John Wright.

John and Thomas Johnson. Vitriol works.

Ann Orred.

William Banks.

William Whiteway.

Ann Orred.

Road to Weston Marsh Lane, nearly opposite the bridge on the canal, called Marsh Gate.

William Banks.

William Whiteway.

At the outside of the canal bank, is a tract of marsh before these properties, divided into twenty-nine horse and cow-gates, owned by the following, viz.:—Miss Orred, Mr. Banks, Mr. Whiteway, and Mr. Wright.

[These lands were formerly marsh—before the canal was made—over which the tide flowed. 1839.

The marsh outside of the canal is much decreased in size, and constantly affected. 1839.]

William Banks. The railway from the stone quarries passes through this land.

[From about No. 15 on the plan to Weston Point the Commissioners of the river Weaver have built a substantial stone wall, and put out two or three chevrons for its protection. 1839.]

John Wright.

Ann Orred.

William Banks. House and garden.

William Banks. Railway to Runcorn Hill quarries.

Commissioners of the River Weaver Navigation. House and garden.

Road to the hotel.

William Banks. Hotel, garden, &c.

William Banks. House.

Road to the hotel.

Commissioners of the River Weaver Navigation. Cottage and shop.

Ann Orred.

William Banks. House and garden.

Road.

Joseph Wagstaff. House and garden.

Commissioners of the River Weaver Navigation. Two cottages and gardens.

Commissioners of the River Weaver Navigation. House and yard.

Commmissioners of the River Weaver Navigation. Land.

In front of this the Commissioners are now forming a new Basin, &c., and embanking part of the strand.

Ann Orred.

Open to the strand.

All the lands before enumerated, except the last mentioned, belonging to Miss Orred, are excluded from the river by the canal belonging to the Commissioners of the River Weaver Navigation: consequently are not affected by the line of conservancy.

Runcorn Township, Parish of Runcorn.

The river front of this township is principally occupied by the basins, docks, quays, warehouses, ship-building yards, and other works of the Trustees of the late Duke of Bridgewater and of the Company of Proprietors of the Mersey and Irwell Navigation, whose piers and walls have generally been extended to and built at the line of low water, the steep bank at the edge of the river admitting such enclosures to be made without materially infringing upon the width of water way. Other persons have also enclosed in front of their respective properties; and it seems to have been

considered by them that they had a right to do so, though the Mersey and Irwell Company have latterly disallowed their claim, and have in some instances given notice of their objections to parties encroaching upon the strand.

The river in this part being considerably narrowed and hemmed in, tidal waters run here with great velocity, and occasion considerable destruction to the marsh above, several acres of which, belonging to the Mersey and Irwell Navigation Company, have within the last few years been entirely swept away.

The lines of tide mark are liable to little change or alteration, the channel naturally running close to the side of the river.

The Marquis of Cholmondeley is Lord of the Manor, and holds courts, but does not appear to interfere with or exercise any authority on the edge of the river.

[The old Gut, No. 30 in the plan, formerly called "Boat House Pool," was partly enclosed by the Mersey and Irwell Co., about twelve years ago. 1839.

The Duke's Trustees have taken the remainder, and added to it a ship-building yard. The town, therefore, excluded from the said creek, which some persons complain against.

No anchorage claimed by the Marquis.

Mr. Brundrit purchased all Mr. Cooper's lands, &c.

The public have a right of road from the road near the entrance into the Duke's Dock, &c., along the strand to the Township of Weston, and to the Point.

The high water mark in Runcorn is not subject to any alteration, being principally bounded by the walls of the Mersey and Irwell proprietors, and of the Duke's; the line of low water is not subject to much, except about the Hempstones (Halton Point,) where it is subject to sudden and great changes.

The part marked 10 on the plan, called "No Man's land," is an artificial embankment, raised by the late Duke of Bridgewater, within which is formed a cut or canal; the canal is partly cut in the solid rock and partly built of masonry, the front to the river being composed of paved stone slope. 1839.]

Note.—Each proprietor on the edge of the river claims and in many instances has enclosed to low water mark, the Lord of the Manor not being consulted.

The lines of low water undergo little change, except its progressively gaining upon the marsh lands of late years; the lines of high water the same, except where they are bounded by the quays and piers, which of course keep them within those parts.

The Gutway, a creek up which vessels formerly went to discharge their cargoes for the Township at large, sold a few years ago to the Duke's Trustees, and from which the public are excluded.]

The following are the names of the proprietors :—

Trustees of the late Duke of Bridgewater.

Marsh land, protected in front by slopes of stone at low water mark.

Trustees of the late Duke of Bridgewater.

Lord Francis Egerton.

Open to the beach, the lands encroached upon by the tide at high water.

Ann Orred.

Road to Runcorn.

The public have a right of a road to Weston Point, upon the strand opposite these properties.

Trustees of the late Duke of Bridgewater. Entrance docks, basins, quays, warehouses, &c.

Walls erected at low water mark in front of these.

The island claimed by the Trustees of the late Duke of Bridgewater and Mr. Brundrit.

[The Trustees have a canal between this and the main land, nearly the whole of which is taken from the strand. 1839.]

Trustees of the late Duke of Bridgewater.

The natural beach.

Dennis Brundrit. Ship-building and other yards.

He has erected a wall in front of part of these premises at low water mark, about two-thirds the whole front.

Marquis of Cholmondeley. Ancient ferry, road, and boat-house.

No slip, or other accommodation, provided for passengers, who are landed on the open beach.

Proprietors of public baths.

Erected partly on the strand.

Public footpath between the strand and the churchyard.

Lord Francis Egerton owns the land and strand in front of houses now or lately belonging to Francis Rigby, the Rev. F. Master and William Chorley.

Open to the strand.

Mr. Dennis Brundrit, Philip Whiteway, and Foster. Timber and coal yards.

Open to the beach.

Public road, Queen Street.

Thomas Mellor. Timber yard and steam corn mill.

In front of the steam mill enclosed to low water mark; remainder open to the strand.

Robert Hedley and Co. Slate manufactory.

Enclosed to low water mark.

Trustees of the late Duke of Bridgewater. Stone wharf, shipbuilding and coal yard.

Boat-house Pool, a creek or gut, formerly the public landing place.

Part enclosed by the Mersey and Irwell Co. about twelve years ago, the remainder claimed by the late Duke's Trustees.

Company of Proprietors of the Mersey and Irwell Navigation. Docks, basins, quays, warehouses.

Enclosed to low water.

The Company of Proprietors of Mersey and Irwell Navigation. Marsh land.

This land is much encroached upon by the tide, and several acres have lately been washed away; a chevron here.

Francis and Samuel Rigby.

Nathaniel Alcock Sewell.

Thomas Lyon, Thomas, Peter, and Gilbert Greenall, Esqrs.

William Wright.

Sir Richard Brooke, Bart. Land and plantation.

These lands are within the line of canal, and therefore not affected by the line of conservancy.

Township of Halton, Parish of Runcorn.

Sir Richard Brooke, Bart., is owner of all lands lying between the canal of the Mersey and Irwell Company and the river, the greater part of which the tide formerly covered at ordinary springs, but from which it is now excluded by a sod cop or mound, running eastwardly from the canal near Halton Point towards the river, and there joining the township of Norton, leaving a considerable portion of land still exposed.

That part of the marsh on the west side of Halton Point is much encroached upon, and several acres have been destroyed within the last few years. The low water mark is subject to continual change.

The Marquis of Cholmondeley is Lord of the Manor, and courts are regularly held, but it does not appear that authority is exercised by him on the river or strand.

One chevron in front of this township.

Norton Township, Parish of Runcorn.

The whole of the land between the river and the canal of the Mersey and Irwell Company belongs to Sir Richard Brooke, Bart.; and, lying below the level of the ordinary spring tides, it was formerly overflowed. Sod cops or mounds have at various times been raised to protect the greater portion, and it is only occasionally that the tidal waters now pass over them. The marsh (which is used as a ley for cattle) is still open to the river and to the effects of tides. The river becoming more confined here, the tidal marks undergo little alteration.

The manor belongs to Sir Richard Brooke, in right of which courts are regularly held.

Eighteen or nineteen chevrons are thrown out in front of this township, but some are now being taken up, and a paved bank forming of the materials.

Township of Acton Grange, Parish of Runcorn.

Sir Richard Brooke, Bart., is the owner of all the land on the edge of the river, and though lying low and subject to be overflowed, is affected more by land floods than by the tidal waters. On the margin of the river is erected a sod mound or cop for the protection of the inner lands.

This township lying opposite to Sankey Brook, and the river at this place being wider, the channel is subject to greater change than the adjoining ones, otherwise the tidal marks are little affected. Sir Richard Brooke is Lord of the Manor and in right thereof holds courts.

One chevron appears near the boundary of Norton township.

Lower Walton Township, Parish of Runcorn.

The river abutting this township is not subject to nor does it undergo any change. The lands on the margin are protected by sod cops or mounds, and (except about opposite to Bank Quay) are not much affected by either tidal waters or land floods.

No manor courts are held, nor is there any acknowledged lord. Peter Langford Brooke, Esq., did claim a moiety of the manor, but the landholders generally disallowed it, and it does not appear either he or they who claim the remainder have exercised any authority.

[In consequence of this lordship being disputed, the Railway Co., who have to pay something to the township, hold the money in hand. 1839.

At a twenty-feet tide the lands in this township, opposite to Bank Quay, are covered. 1839.]

The following are the names of the proprietors of lands on the edge of the river:—

Trustees of the late Duke of Bridgewater.

John Malbourne.

John Ford.

Peter Langford Brooke, Esq.

Four or five chevrons erected here.

Mrs. Grime.

John Clare.

Peter Langford Brooke, Esq.

John Malbourne.

A chevron.

Peter Langford Brooke, Esq.

A chevron.

Mrs. Grime.

Peter Langford Brooke, Esq.

John Kinder.

Peter Langford Brooke, Esq.

John Malbourne.

Peter Langford Brooke, Esq.

Occupation road.

Joseph Wagstaff.

The Company of Proprietors of the Mersey and Irwell Navigation. Canal and Towing Path.

The Grand Junction Railway Co. Railway.

The Company of Proprietors of the Mersey and Irwell Navigation. Towing Path and Canal.

Township of Appleton, Parish of Great Budworth.

Thomas Lyon and Thomas, Peter, and Gilbert Greenall, Esquires, are the owners of all the property on edge of the river in this township, consisting principally of plantations, gardens, stables, yards, workshops, cottage, and public-house.

The river here being much confined in width, and the land being more elevated, little injury is sustained by either tidal waters or land floods.

Rowland Egerton Eyles Warburton, Esq., is Lord of the Manor and holds courts, but does not exercise any authority on the margin of the river.

There are three small chevrons thrown out in front of this township.

Township of Latchford, Parish of Grappenhall.

The river, on the edge of which this township extends, being for the most part enclosed with piers and walls, is not subject to any change or alteration from the effects of tide.

The land floods (particularly when the tidal waters are forced up) do occasionally overflow the banks to some extent, otherwise the waters are confined to the course of the river.

James Hugh Smith Barry, Esq., claims to be Lord of the Manor, but he does not hold any court, nor does he interfere with parties enclosing the fronts of their respective properties, who, in most cases, have taken as far as low water mark.

The following are the names of persons owning properties on the edge of the river :—

Brook dividing townships.

Thomas Lyon, Thomas, Peter, and Gilbert Greenall, Esqs. Plantation.

Public road.

T. Lyon and T. P. and G. Greenall, Esqs.

Public road.

Isaac Picton.

Public road.

Isaac Picton. House and land.

William Byrom.

William Perrin. House, &c.

James Crosfield. House, &c.

Public road.

William Mallet. House.

Peter Weedall. House.

Thomas Picton. House.

Mesdames Susannah Garnett and Betsey Furniss. Three houses, &c.

John Robinson. House.

William Frost.

Mary Hall. Two houses.

Between these properties and the river, is a road of ten yards wide, beyond which each proprietor claims the right of enclosing to the edge of the river.

William Heath, William Bolton, and Edward Baker. Three houses.

[Mr. Baker has enclosed about half-way down the bank here. 1839.]

Public road.

Edward Baker. Garden, &c.

William Beaumont.* House and garden.

Enclosures from the strand, of an ancient date, have here been made in front of these properties.

William Hutton. House and garden.

John Cock. Stone yard.

Isaac Picton. Yard, stable, and house, &c.

John Cock. Public house, yard, &c.

Bridge and public road to London, &c.

Warrington Township, Parish of Warrington.

The river bounding this township being confined in width is subject to little change in the lines of tide mark. On that part of it adjoining to the bridge over which is the public road to London, &c., and in front of properties there belonging to Mr. Legh and Mr. Harrison, a quay or wharf is erected, of an ancient date, and is now being added to by Mr. Patten, who intends to carry it to the front of a warehouse lately erected by him. In doing so, part of the strand, to the amount of 6 or 8 yards in width, will be enclosed.

At Bank Quay Mr. Patten, the Bank Quay Glass Company, the Messrs. Litton (under a lease from Mr. Lyon), and Broadhurst (under a lease from Lord Lilford), have ancient quays and wharves: these, with ten chevrons thrown out in

* ? Beamont.

various parts to protect the adjoining lands, are the only encroachments.

John Ireland Blackburne, Esq., M.P., is Lord of the Manor, and holds courts regularly, but it does not appear that he exercises any authority on the strand.

[Little Sankey formerly part of the Township of Warrington, in which parish it is. Lord Lilford owns the manor and holds courts: he also owns the whole of the gate-warth or wharf on the edge of the river. No change in high water or low water. Mr. Blackburne formerly claimed toll in Warrington for all corn landed from the river. Does not claim rights of fishery. 1828.

The river appears to have changed its course, either by an artificial cut, or on the occasion of some great flood; and that land which appears to be in the County of Chester, is in reality in the Township of Warrington, and County of Lancaster. About this part, the river once famous for smelts and salmon; now few taken. 1839.]

The following are the names of the owners of land, &c., abutting the river:—

Bridge and London Road.

Joseph Lee. House, court, and strand.

Richard Harrison. Flour mill, drying kiln, and strand.

John Wilson Patten, Esq., M.P. Land in lease from Mr. Legh, formerly house and outbuildings.

John Wilson Patten, Esq., M.P. Warehouse, land, and strand.

Mr. Patten is now erecting a quay-wall in front of his warehouse, &c., and extending to low water mark, with the sanction of the Mersey and Irwell Company.

In front of these properties is a private road, of about six yards wide, to Harpley, leaving the strand, which is claimed by each proprietor.

Thomas Lyon. Land.

Thomas Legh, Esq. Land.

James Peirpoint. Land.

Thomas Legh, Esq. Land.

James Peirpoint. Land.

Rev. James Wright. Land.

The river encroaching upon this land.

John Cassidy, Mary Hatton, and Mary Greenhalgh. Land.

Holbrook Gaskell, Exors. of Wm. Gaskell. Land.

Thomas Lyon. Land.

John Wilson Patten, Esq., M.P. Land.

Thomas Legh, Esq. Land.

John Wilson Patten, Esq. Land.

Thomas Legh, Esq. Land.

John Wilson Patten, Esq., M.P. Land.

Fitz James Watts, Esq. Land.

Thomas Lyon. Land.

Grand Junction Railway Company. Railway.

Thomas Lyon. Land.

Thomas Legh, Esq. Land.

John Ireland Blackburne, Esq., M.P. Land in lease from Mr. Legh.

Private road extending from the brook to the warehouses, &c.

[Note.—The mouth of this brook is kept in repair by the Mersey and Irwell Company, and at this place their tolls commence.]

Pier and boarded quay erected about three years and a-half ago.

John Wilson Patten, Esq., M.P. Warehouse and yard.

John Wilson Patten, Esq., M.P. Fourteen cottages and quay.

Bank Quay Glass Company. Quay, road, and nine cottages.

Bank Quay was built about twenty years ago. The Company claim toll for goods landed.

Thomas, John, and William Litton. Mill, outbuilding, and quay, under a lease from Mr. Lyon.

Quay wall built on part of this front, and upwards of sixty years ago.

Thomas, John, and William Litton. House and garden.

John Haddock and others. Land.

Broadhurst. Under lease from Lord Lilford.

Remains of an old quay in front of warehouses and house.

Lord Lilford. Land.

Lands protected from the river by a cop and embankment, and the banks by ten chevrons in the whole front.

Sankey Brook.

Penketh Township, Parish of Prescot.

The river in front of this township beginning gradually to expand, and taking a circuitous course, the channels and tide marks are subject to more frequent change than higher up. The proprietors of the Sankey Navigation (whose canal formerly connected with the river at this place, and has lately been extended to West Bank, in the Township of Widnes), have erected a permanent wall of considerable length, for the protection of their lock basin and lands adjoining.

The banks adjoining Penketh Brook are likewise similarly defended, independently of which there are chevrons erected on the strand in different places.

In this township is Fidler's Ferry, belonging to Mrs. Hughes, but it does not appear that she has the privilege of landing on the opposite shore without making some acknowledgment to the landowner there.

The manorial rights are claimed by Mrs. Hughes [of Shirdley, near St. Helens], and formerly a court was held; but this has been discontinued some years, and her claim seems not generally acknowledged.

[The boundaries walked about twelve years ago.

Thomas Ellison has two coups or fish yards, but pays no rent.

Fidler's Ferry belongs to the Sankey Canal Company.

The warth or wharf belongs to the Canal Company, bought from Mr. Gwilliam; the Company have extended their works into or upon the strand.

The line of low water is subject to continual change, particularly during spring tides and freshes.

The line of high water remains unchanged, except from peculiar circumstances, such as high winds at spring tides, or heavy rains, when these low lands on the edge of the river, over which the tide at some remote period flowed, are covered with tidal water.

No gravel, &c., taken from the strand; the privilege of fishing without payment of any sort appears to be enjoyed, latterly without any positive right. No royal fish have been taken. 1828.]

Names of the owners of land fronting the river :—

Sankey Brook.

Mrs. Hughes. Land.

Mrs. Hughes. Marsh.

Between two chevrons here the bank appears to have been paved with stone, but is now much dilapidated.

Ferry House. Garden, &c.

Proprietors of the Sankey Navigation. Lock, house, garden, and land.

Proprietors of the Sankey Navigation. Canal basin and lock.

Stone wall erected in front of these.

Proprietors of the Sankey Navigation. Lock, house, garden, and land.

Mrs. Hughes. Land and marsh.

Brook dividing the townships of Penketh and Cuerdley.

[Fidler's Ferry belongs to Mrs. Hughes; payment is made to Sir Richard Brooke, Bart., for permission to pass over his land. There are five or six chevrons in front of this township; have been erected a great many years. Mounds or cops have been raised on the marsh lands to keep off the tidal waters; in the space of about thirty years 4 to 6 acres have been destroyed. 1839.]

Cuerdley Township, Parish of Prescot.

The river here continuing to extend in width, and the land adjoining it being composed of alluvial deposit, the tidal marks are more easily affected than in the Township of Penketh, particularly the line of low water, which is subject to continual change. The marsh being on the level of ordinary springs, is at high water covered to a great extent, leaving, however, a large portion within the embankment over which the tide only occasionally flows. One chevron appears to have been erected, and with this exception the river remains in its natural state.

Sir Richard Brooke, Bart., is owner of all the land, and Lord of the Manor. A court is regularly held, but it does

not appear that any authority (except the erection of the chevron) is exercised on the strand.

[No rights of fishery exercised. No wrecks. The boundaries are occasionally perambulated, say every twenty years. The marsh contains about 260 acres, and is divided into 500 cowgates.

After the dissolution of Abbeys in England by Henry VIII, Richard Brooks purchased from the King the Manor of Cuerdley, with other lands; the charter dated decimo die Decembris 37 Hen. 8, 1545, whose heir now enjoyeth these lands, 1666. *Leycester's Cheshire.*

Sir Richard Brooke created baronet 1662.

The line of high water is gradually encroaching upon the marsh lands, a considerable portion of which has disappeared of late years.

No gravel or other material taken from the strand.]

Township of Widnes [*cum-Appleton*], *Parish of Prescot.*

The river in front of this township takes a peculiar form, occasioned by the promontory about its centre called West Bank, the shore of which, being composed of rock, confines the river, which at this place, called Runcorn Gap, is within comparatively narrow limits.

On each side of this promontory the river forms spacious bays, and the lands adjoining it being of alluvial deposit are easily acted upon by the tide.

The Company of Proprietors of the Sankey Brook Navigation have lately continued the canal from Fidler's Ferry, and have to the east side of West Bank erected quays and docks to communicate with the river. The Proprietors of the St. Helens and Runcorn Gap Railway Co. have also made this the terminus of their line, and have similar works, each of which have been constructed under the authority of Parliament, and are confined within the then line of high water.

The low water mark both below and above West Bank is subject to frequent change, but opposite thereto varies little, the stream running on the Cheshire shore.

The Marquis of Cholmondeley is Lord of the Manor, and holds courts regularly, [at Farnworth. Leasehold of the Duchy.]

Mr. Hurst claims the strand under West Bank, cuts such rock as he may require for his own use from it, and is paid for all goods landed and placed there. If the goods are carted away immediately, toll for passing over his land only is exacted.

The ferry belongs to the Marquis of Cholmondeley, Mr. Hurst and his tenants on West Bank estate having the right to pass and repass without making any payment.

[Fishyards are on the rocks called Hurst rocks; no rent paid for them, except that Mr. Hurst takes the fish on one day in each week.

The line of low water below Runcorn Gap does not undergo much alteration, with the exception of those periods when strongly acted upon by wind at spring tides, and freshes: the same may be said of that part above. At these times the currents take other directions, and new channels are formed. This is particularly the case now (1828). The current sets so directly upon the Cheshire shore about Halton Point, that the marsh there is rapidly diminishing. The general line of high water is liable to little variation or change, allowing for the gradual and continued inroad which the tidal waters appear to make on the whole of the marsh lands on the edge of the river.

No gravel, seaweed, or sand is taken from the shore.

Formerly large tracts of land were under the level of ordinary spring tides, these have in part been embanked and enclosed, and are enjoyed by the several landowners in the township; other parts remain unembanked, and are subject to be occasionally overflowed by the tide, but are depastured by and claimed by several persons in proportions called cowgates.

See *Sir Peter Leicester's Cheshire*:—

Pages 272, 273. Widness.
274. Barony of Halton.
275. Annexed to Lancaster.
282. Waters of the Mersey, Royal Fish, Halton manor.
291.
325. Cuerdeley.

See evidence in the Duchy office, in two books called "Coucher Books." "Proceedings in Duchy Courts," in the Library, Royal Institution, Liverpool.]

The following are the names of the owners of lands abutting the river :—

Canal overflow and brook dividing the townships of Cuerdley and Widnes.

The lands on the outside of the canal, and between it and the river, are wholly marsh, divided into sixty-nine cowgates, and owned by the following—John Shaw Leigh, Esq., Wm. Frazer, Thomas Roscoe, Miss Rowson, David Bellhouse, Matthew Gregson, Thomas Kidd, the Exors. of the late Martha Roughsedge, Mary Johnson, Joseph Knowles, James Gossup, William Taylor, John Clemenson.

St. Helens and Runcorn Gap Railway Co. Quays, dock, and railway.

Proprietors of the Sankey Navigation. Quays, basins, and canal.

William Hurst. Plantation.

Wm. Hurst. Public house, ferry, outbuildings, garden, &c.

This is the ferry in which Mr. Hurst claims an interest.

William Hurst. Plantation and land.

William Hurst. Marsh.

The Marquis of Cholmondeley as Lessee under the Duchy of Lancaster. Marsh.

[This is the part for which the Duchy obtained a verdict in a trial with Mr. Hurst. 1839.]

[Almost all the lands in this township are copyhold. The following are owners of cowgates on Widnes Werth or Wharf, 69 in all :—

Mr. Leigh,	Mr. Bellhouse,	Mr. Rawson,
Mr. Taylor, 23,	Mr. Kidd,	Mr. Wm. Ashton,
Mr. Lawrence,	Mr. John Johnson,	Mr. Knowles,
Mr. Gregson,	Miss Roughsedge,	Mr. Thos. Roscoe.

The marsh has considerably decreased in size within the last ten years. Wm. Holme, of Carter House, says the line of low water is subject to

considerable change. Lord Cholmondeley claims that part of the marsh which Mr. Hurst intended to embank about twenty years ago (1828), on behalf of the Duchy, as a derelict, or land forsaken by the owner.]

Ditton Township, Parish of Prescot.

The land abutting the river in this township, which has a very small frontage, belongs to Mr. Bretherton, and is subject to frequent irruptions of tide water.

The Duchy of Lancaster claim the marsh in front.

There is no acknowledged Lord of the Manor.

[The late Mr. Watkins did claim, but not acknowledged. It appears that Mr. Blundell, of Crosby, formerly held it. No material change in the general line of low water, though subject to some alteration during the prevalence of particular winds. The general line of high water is gradually progressing inland.

No gravel or sand taken from the shore.

At some remote period a considerable tract of land called Ditton Marsh appears to have been within the reach of the tidal waters, great part of which is now enclosed with mounds or embankments; other part is still occasionally overflowed at spring tides, and is depastured in common by the several landowners in the township, in proportions called cowgates. In 1839 E. E. notes, "there are not any cowgates, "these having merged in the general enclosure."

No courts, no perambulation, no fishery, no wrecks.

Township of Halewood, Parish of Childwall.

The river in front of this township, running between the promontories "Hale Head" and "West Bank," forms a spacious bay; and being thus protected from the principal current, the lands abutting it are not much affected by its waters. In places where the banks are steep, the wash of the tide brings down portions, but not to any great extent, as appears by the marsh in front, which is in about the same state that it has been for many years.

No particular change occurs in the tide marks.

About thirty-seven years ago Mr. Willis constructed a

stage or "staith" for loading vessels with coal, but, with this exception, no erections have been made on the shore.

Each proprietor claims the strand in front of their respective properties to low water mark.

The Right Honourable the Earl of Derby is Lord of the Manor, and holds courts regularly, but does not appear to have exercised any authority between the lines of high and low water.

[Thomas Croft, of Halebank, fisherman, aged 66, pays no rent for fishing: says, the low water mark much *nearer* the shore than formerly, that the marsh is washing away, and the *deep* progressing inland: little alteration in high water mark, but the lands are *gradually* diminishing. Gravel is taken from the strand for the repair of public roads, but no other purpose: does not recollect if any wrecks are or have been claimed by the Lord of the Manor.

The tidal water constantly acting upon the bank or edge of the shore causes it to give way, and has considerably diminished the quantity of marsh; in other respects the general line of high water remains the same.]

The following are the names of proprietors of lands fronting the River:—

The Right Honourable the Earl of Derby.

Mrs. Ellen Etches.

Gilbert Halsall or the Exors. of the late John Halsall.

Mr. Willis.

Stage or staith formerly here.

John Ireland Blackburne, Esq., M.P.

Township of Hale, Parish of Childwall.

In this township is situated the promontory "Hale Head," on each side of which the river forms spacious bays. On the east the land, from its exposed aspect, and being in the line of current, is liable to continual waste and destruction, upwards of ten acres of main land having disappeared within the last forty years. The devastation of marsh on the west side of the Head is also very great, for in the year 1756, Mr. Blackburne had, according to a map in my possession,

165 acres of land, which are now reduced to 23 acres. To this promontory also may be attributed the frequent change which takes place in the channels in its vicinity.

John Ireland Blackburne, Esq., M.P., is the owner of all the land abutting the river, with the exception of a small frontage belonging to Mr. Ashton, and principally occupied by buildings for making salt, part of which, erected upon the strand, are of ancient date.

Mr. Blackburne is likewise Lord of the Manor and claims the exclusive right of strand; is paid toll for all goods landed, and for vessels anchoring; appoints his own coroner, water-bailiff, &c.

[6th Aug., 1828. Mr. Blackburne has been paid for liberty to anchor vessels on the strand in Hale 14s. 8d. per annum for about twenty years (in the recollection of Mr. Owen), by the Trustees of the Duke of Bridgewater.

The high water mark gradually encroaching on the enclosed lands, except where the boundary is rock; little alteration in the general lines of low water mark.

James Allen, of Hale, has known Hale nearly fifty years, and says that Mr. Blackburne claims all wreck on the shore, fishery, anchorage, tolls for passing to and from the river. Gravel taken from the shore, for repair of roads in the township, without charge.

Almost wholly belonging to Mr. Blackburne—the township 1547 statute acres.

Very slight alteration is to be observed in the general line of high water, excepting on that part of the shore between Halehead and Halewood, which is gradually encroached upon by the tidal waters. Mr. Ledger says the lands within forty years, about ten acres are destroyed.

The embankment at Dungeon Saltworks made upwards of ninety years ago (1828) by the ancestor of the present proprietor (Mr. Ashton.)

Courts have been held for a long series of years, say from about Edward II.

There is no public road from the shore, Within Lane being private. The lands between Within Way and the Dewy washing away, about ten acres gone.

The river between Halehead and Weston was formerly often passed by a ford there; and the minister on removing from Hale to Wrexham

about the year 1808 carted the whole of his household goods, &c., by that ford. Mr. Blackburne says he has often driven his horse and gig across. 1828.

In the year 1756 the marsh contained about 165 acres; in 1835 it was reduced to 22a. 3r. 2p.; about the same quantity now, 1839.

Mr. Blackburne claims extensive powers. See *Gregson's Fragments*, to which he refers me. 1839.]

Speke Township, Parish of Childwall.

The river in front of this township is not subject to any material change, except that the principal stream appears, within the last seven or eight and twenty years, to have been impeded in this direction.

During this period a considerable portion of marsh, between Speke Point and Garston Salt Works, has been washed away, and the land on the edge of the river much encroached upon. In the year 1756 a considerable portion of marsh likewise existed about the Dungeon Salt Works, which is now entirely swept away.

Richard Watt, Esq., is owner of all the land in this township*, (except a small portion belonging to Mr. Ashton, and adjoining to his Salt Works,) is Lord of the Manor, and in right thereof holds a court. No authority appears to have been exercised by him on the strand, except the erection of three chevrons to protect the sands, and these were either projected or discontinued under some agreement or understanding with the Corporation of Liverpool.

[Sixteen or eighteen years ago (1828) Mr. Watt erected three chevrons on the shore, to protect his property from the effects of the current, which so changed its direction, that a considerable portion of marsh land, which lay between Speke point and Garston saltworks, then began to be washed away. Since my survey (E. E. *loq.*) in 1813 it is wholly gone, and the bank is also wasting. No perceptible difference in the line of low water mark.

Hoglet a hamlet in Speke.

* Purchased from the Beauclerk family.

The line of high water is subject to little change, allowance being made for the gradual washing away of the lands, which is the case along almost the whole frontage to the river, particularly between Garston boundary and Speke point.

Note—That about twenty years ago (1828) there was between Speke point and Garston a considerable tract of marsh land, now carried away. Mr. Watt erected chevrons to protect his land there.]

Township of Garston, Parish of Childwall.

The lands abutting the river are principally composed of steep clay banks, and for the last thirty years have been subject to great injury from the washing of the tide. Within this period large quantities have been destroyed, and are continually being similarly acted upon.

The line of low water does not alter materially. In the year 1793 the Manor of Garston was purchased by the late Mr. Blackburne, who, in the same year, erected, under the authority of Parliament, a dock and salt works, partly upon the strand. Subsequently, Mr. Blackburne claiming the exclusive right of strand (although this was not generally acknowledged), sold to various persons the fronts of their respective properties. Courts were formerly held, but have been for some years discontinued.

Thomas Hawkes, Esq., M.P., is the representative of the late Mr. Blackburne.

[25 July, 1828. Mr. Moss, of Otterspool, says, in March, 1816, he was prepared to go to trial with Mr. Blackburne, who claims to be the Lord of the Manor of Garston, and owner of the strand or shore of the river Mersey, to which Mr. Moss and others owning property on the river disputed: that in the opinion of the late Mr. Evans, then Vice-Chancellor,* who was staying in the house of Mr. Moss, and examined into all the evidence adduced, the dispute was compromised, and the several parties afterwards agreed with Mr. Blackburne to purchase his rights to the strand between high and low water marks, being satisfied his title to it was not to be resisted. Mr. Moss paid £500 for the strand. In the survey of 1771 (of Mr. Tarleton's property), the mouth of Otters-

* That is, of the Duchy of Lancaster.

pool open to the river. The mill supposed to be erected *circa* Dec., 1779, at a cost of £2,439 12s. 7d., including cottages for workmen, by Mr. Alexander, afterwards Alexander and Tate. The *amount* stated on the authority of a note from Mr. T. to E. E.

The general lines of *low* water have undergone little change within the memory of the oldest fisherman now living. The lands adjoining the shore are continually washing away, and more so within the last twenty-five years than formerly. Edward Miller, of Garston, fisherman, aged 68, has known the shore all his life, and he and his father have rented the fishyards during the time Mr. Blackburne has been Lord of the Manor. He recollects Caryl Appleton, James Potter, Nathan Miles and others, old men now dead (1828), who had the fishyards on the shore, and paid rent to Lady Beauclerk* for them; says all persons paid for shingle and gravel taken from the shore; only he and William Cook have any fishyards in Garston; that few fish are taken, in consequence of the destruction by dye-water, &c., from Manchester, &c. The low water mark is partly as it has always been; but the banks have been very much washed away, particularly within the last twenty or twenty-five years. A bank is forming on the rocks at the saltworks.

The Duchy of Lancaster has several detached lands in the township, and at that part called Aigburth.

About the year 1788 Mr. Richard Kent, of Liverpool, purchased the manor of Garston from the Corporation (?) per Messrs. Ashton and Gerrard, for £2,200.

Messrs. Peter Baker and John Dawson (who) held the manor of Garston, and also certain leasehold lands at Garston held by letters patent from the Crown for a term of years, did, in the life-time of Richard Kent, contract to sell the same to Richard Gerrard and James Gerrard; and the same Richard Kent afterwards contracted to purchase the same premises from the said Richard and James Gerrard, which premises Richard Kent by his will expressed to have been purchased from Messrs. Ashton and Gerrard; and after the death of the said Richard Kent, they the said Baker and Dawson, by indenture, &c., 3 and 4 January, 1791, by direction of Richard and James Gerrard, for £2,200 convey the said manor of Garston, and also the said leasehold premises to E. Kent, T. Naylor, and Richard Wood, as trustees of the will of the said Richard Kent.

* Widow of Lord Sidney Beauclerk, formerly Mary Norris, of Speke.

2 February, 1793. The manor of Garston with the leasehold *purchased* by Mr. John Blackburne, who leased that part of the shore on which the saltworks are erected, to Mr. Patten and Mr. Hornby, trustees under the will of John Blackburne, of Orford.

See Mr. Blackburne's Act, to change the site of the saltworks. 33 Geo. III, 1793.

Leasehold lands in Garston called "Savoy lands," granted to Topham Beauclerk* for 20½ years, commencing 22 May, 1786. Under letters patent, dated 31 May, 1776 (?) shall be vested in the executors of Richard Kent, from and after the 1st June, 1793, for the remainder of the term of 20½ years. Lease expired in 1806.

NOTE.—A road to communicate with the saltworks from Whindown Lane, not less than 30 feet wide, on the strand for the use of the public.

SAVOY LANDS.—10 Aug., 1807. Certain lands in Garston, leased by the crown to Mr. Blackburne for 18 years 322 days, at the annual rent of £76. See *Commissioners' Reports on Woods and Forests*, 1812.

In 1793 there were fishyards on the rocks where the saltworks now are; previously to that date Mr. Williams had erected vitriol works on the strand. NOTE.—The north side of the pool is called waste.

Henry Carter, of Garston (overseer) has an old plan of houses in Garston, with an account of manorial claims, &c.

The following inclosures and embankments have taken place, viz.:—In the year 1780, Messrs. Tate, Alexander, and Wilson inclosed a part of the strand at the mouth of Otterspool (now the property of Mr. Moss) and erected thereon a snuff-mill with its appurtenances. In the year 1816, Mr. Moss purchased all the Lord of the Manor's interest in the strand in front of his property there, and made some further embankments. Subsequently, a few other individuals, (Miss Parr, Mr. Salisbury, Mr. Richard and Arnold Harrison,) purchased the interest of the Lord of the Manor to the strand opposite their properties, and have embanked the same against the tide. 1828.

The general line of tide mark is not subject to any great deviation now, except with the continual wasting of the steep clay banks which abut the river; the strand is in the same state it has been in for a great many years. 1839.]

* Only son of Lady Mary Beauclerk; and an associate with Dr. Johnson, Sir Joshua Reynolds, &c. In *Transactions* of this Society, 1867–8, "Topography of Garston and Aigburth," it is erroneously stated that Mr. Beauclerk died without issue; he is represented in the direct line by A. de V. Beauclerk, of Ardglas Castle, Esquire.

Names of proprietors of land, &c., on the edge of the river :—

Brook and road dividing township.

Thomas Hawkes, Esq. Plantation.

Thomas Hawkes, Esq. Land.

Thomas Hawkes, Esq. Cottages.

Road.

Thomas Hawkes, Esq. Cottages and Land.

This land is said to have lost about 15 yards in width along its whole front in about twenty-five years.

John Blackburne and Co. Salt works.

The quay, pier, docks, and other works connected with the salt works erected on the strand, and commenced about the year 1793. See the Act of Parliament, 33 George III.

Creek or Pool.

Thomas Hawkes, Esq. Cottage and land.

A considerable portion of strand was enclosed here before the year 1793, and on part were formerly the vitriol works of Mr. Williams.

The Exors. of the late Wm. Hope, Esq. Land.

Mr. Hope's executors state the strand was purchased long before the late Mr. Blackburne became possessed of the manor; and claim to low water mark.

This land is open to the shore and suffers much from the effects of tide, about 15 yards in width is supposed to have been destroyed within the last 20 years.

Mr. John Woolwright. Land.

The strand in front purchased by Mr. W.

This land having no protection from the tide, suffers greatly.

Occupation Road.

Messrs. Thomas F. Bennet, Thomas Bouch, Alfred Waterhouse, William Smith, and James Mawdsley. Land.

The strand belongs to these gentlemen.

Part of the front of this land was protected from the tide ten or twelve years ago, by a wall built partly on the strand, which has since been thrown down, and the land is encroached upon 10 or 15 yards in width for nearly the whole front.

Mr. Thomas Stephenson. Land.

The front of this land has no protection against the tide, which is making great inroads upon it.

Nicholas Salisbury, Esq. Land.

Mr. S. purchased the strand to low water mark.

Formerly enclosed by a wall of stone taken from the beach, but this is now thrown down, and a considerable portion of land also destroyed.

John Moss, Esq. Dwelling houses in the occupation of Mr. Henry Moss and Dr. Formby. Land, gardens, oil mill, and plantations, &c., to his own house "Otterspool."

Mr. Moss owns the strand in front of these properties by purchase from Mr. Blackburne, the whole of which is protected from the effects of tide by a stone-paved slope or sheeting, built partly about the then line of high water, except about the mouth of the pool, where portions of the strand have been taken in.*

Township of Toxteth, extra Parochial.

This township adjoins to and forms the southern boundary of the Town of Liverpool. In front of that part of it called Harrington, very considerable embankments, as basins, half-tide, wet and graving docks, quays and wharfs, have been forming for the last twenty-five years, enclosing large quantities of strand, and in places projecting even into the bed of the river. The principal part of these works has been constructed by the Trustees of the Liverpool Docks, under the authority of Parliament, and are in connection with similar erections belonging to them in Liverpool. More recently the Trustees of the Harrington Docks, Lord Francis Egerton, the Ellesmere and Chester Canal Company, Messrs. Lace and others, have enclosed large tracts of strand, on which they also have made docks, wharfs, &c. These latter enclosures have not been under the sanction of Parliament, the Lord of the Manor claiming the shore between high and low water,

* For further information respecting this township and manor see "The "Historical Topography of Garston and Aigburth," read 30th April, 1868, in the *Transactions of the Historic Society of Lancashire and Cheshire.*

under which title they have been constructed. The width of the river opposite has been much decreased by these several works.

From the rocks "Dingle Point" to "Otterspool" the sands are subject to continual waste, the wash of the tide, where they are not properly protected, bringing down large portions of the banks, which in this district are generally precipitous. The line of low water has not undergone any change, except in front of the recent erections.

The Right Hon. the Earl of Sefton is Lord of the Manor. No courts are held.

The shore opposite "Jericho" is constantly changing, but not so much as others, from lying in a small bay. Under this farm are fishyards rented by Edward Whittle, of Garston, at 30s. per annum; and within the last two or three years (1828) Mr. Leigh, as lay Rector of Walton, claimed tithe of fish. Whittle now pays 5s. His father, Thomas Whittle, had the fishyards from about 1800 to 1821; Henry Carter, of Garston, held them about fifty-two years ago.

Charles Whiteside, of Park Chapel, Toxteth, remembers in the year 1810 several bags of cotton being thrown upon the shore in Toxteth, which he picked up and caused notice to be given to the underwriters, E. W. Dickenson, brokers, who paid him salvage. Lord Sefton's agent claimed and received a portion.

[John Dickenson, son of the man who had the fishyards now destroyed at Dickenson's Dingle, was employed by Lord Sefton to look after wrecks, &c., but discontinued to do so because he received no remuneration. John Jones, there employed as a fisherman, remembers about —— a balk of timber floating down the river, which he brought to shore: claimed by Lord Sefton. About forty years ago (1828), a vessel called the "William and Mary," wrecked on the shore between the Pottery and Knott's Hole. Liverpool Corporation took her to pieces. *Query*, if the Lord of the Manor made any claim.

Old Mrs. Brookfield keeps an inn, and has lived upwards of fifty-five years in Toxteth (1828), does not recollect any courts being held, though Mr. Webster many years ago made some bustle to do so on behalf of Lord Sefton; after a meeting or two, at which no business appears to have been transacted, it fell through.* No perambulation

* Mrs. B. says the attorney of the court, if such it might be called, was a Mr. Patten, who afterwards went to reside in London.

of boundaries in her recollection until within the last twenty years or thereabouts. She says there were no regular sworn constables appointed in the township; nor did the landholders pay any proportion of the county rates. About fifty-seven years ago she lived with her father on the estate now belonging to Messrs. Yates, and it was about that time when the copperas works were commenced upon. William Miller, attorney, says courts have been held for the last fifty years or upwards; but there are at Croxteth records of proceedings at an earlier date. No perambulations of boundaries have ever taken place, as they are all well defined.

John Carter, aged 71, in the employ of Messrs. Troughton and Ryan, Sefton Street, recollects the shore very well between Liverpool and Garston (having lived servant with John Dickenson, at Dickenson's Dingle, upwards of fifty years ago), says the fishyards, when he first knew them, were at Jericho, Dickenson's Dingle, and Knott's Hole; rent he understood to be paid to Lord Sefton either in cash or fish. He says that about fifty years ago a court or courts were held at Mrs. Gore's, in Stanhope Street, but never heard what business was transacted, though several of the landlords, particularly Mr. Bisbrown, attended: understood an attorney from London acted as clerk of the court.

John Dickenson, aged 63, lives at the Tall House, formerly lived with his father (upwards of fifty years ago), at an estate of Lord Sefton's, now Mr. Woodhouse's: recollects himself, and has heard his father say, that carts, &c., going to and from Liverpool, passed along the shore, particularly in winter time, when the roads inland were so bad they could not be used; also that a footpath went through the fields on the edge of the river between the same places. Says his father had a warrant or authority to take all strays or wreck on the shore for Lord Sefton, which was continued to him; but in consequence of not receiving any remuneration for his trouble, he has now given it up. Recollects a variety of articles being taken, for which Lord Sefton was always paid his demand.

Note.—When Dickenson had the land, he paid no separate rent for fishyards.

Mr. Roger Leigh farmed the Great Tithes in Toxteth upwards of twenty years ago, and held them about ten years: during that time he took the tithe of fish on the Friday.

Mr. Keightley informs me the first lease granted to Charles Roe for that part of the strand, &c., on which the copperas works are erected,

was dated 1st May, 1772. Next lease to Roe is in 1773, for 80 years. In 1804 Lord Sefton sold the reversion of the strand to the Corporation of Liverpool, and Roe and Leigh sold the unexpired term of original lease for 80 years about the same time.

Mr. Robert Kitchen remembers the tide flowing to the west wall of Sparling's blubber house;* and also recollects a whale being cast upon the shore, near Jackson's Dam, in the year 1790. Claimed by Lord Sefton.

5th Geo. III, the Earl of Sefton obtained an act of Parliament to confirm several building leases granted of part of his settled estates in the County of Lancaster, and to enable him, during his life, and, after his death, the trustee during the minority of any infant, to grant any other building and improving leases, &c.

Adam de Molyneux (in the year 1228), it is supposed, held the Forestership of Toxteth, originally one of the royal parks in West Derby: as such, extra parochial. This was before the formation of parishes in the country; and it appears that the Crown granted the Tythes of persons who agisted Toxteth to the *Church of Lancaster;* which it enjoyed for a number of years.

It was valued in 1327 at £7 9s. 4d. annually; and in 1346 let to the Molyneux family for £17. In 1426 it was recognised as a park belonging to the Duchy of Lancaster, and was in the possession of and maintained by the Crown, who appointed the Forester and other officers regularly, until the reign of Elizabeth; after which it appears to have been neglected, and got into the hands of the subject.

The monks of Whalley petitioned to be removed from thence to Toxteth.

In 1593, 35 of Elizabeth, the park was granted to Henry Earl of Derby, and his heirs male, and again reverted to the Crown, probably in default of such heirs. It was disparked 2nd of James I, and on 25 October, 1604, was granted by the Crown to Ralph Willey and Thomas Dodd, citizens of London, who on the 6th March following granted the same to Richard Molyneux, an ancestor of the present family, under which title it is now held.

Toxteth is generally considered within the Parish of Walton, but from numerous documents now in existence it does not appear to be so, if its rights are properly maintained; for several years past some of its

* Planned in 1770—John Eyes's Ledger. Jackson's dam set out, 1774.

tythes have been paid to Walton—so lately as about 1770 Toxteth was admitted extra parochial.*

The first embankment appears to have been made by Mr. Charles Roe, to whom the then Earl of Sefton on 1st May, 1772, leased (with other lands) that part of the strand on which the Herculaneum Pottery Company have their works. They have subsequently purchased from the present earl (1828) a further portion of strand, the inclosing and embankment of which is now completing.

In the following year (1773) the said Charles Roe took on lease for 80 years an additional grant of strand, being that part on which the Tide Mill and reservoirs, called "Jackson's," are erected, and extending northwardly to the boundary of Liverpool. The mill and reservoirs were soon afterwards commenced upon and completed; the remainder of the strand between the large reservoir and Liverpool continued unappropriated until about the year 1804 or 1805, since which period a considerable part of it has been converted into ship-building and other yards by the Corporation of Liverpool.

About five years ago (1828), Mr. Samuel Holland inclosed a small part of the strand on the south side of the Herculaneum Pottery, to which it adjoins, and on which he carries on the business of a ship-builder.

The other enclosures of strand may, perhaps, be more properly called embankments against the sea, as being within or beyond the line of high water mark, previous to the inroad which the tidal waters have made on the border of the river in those parts. Mr. Garnett, Mr. Yates, Mr. Dempsey, Mr. Montgomery, and Mr. Moss are the gentlemen who have made these embankments; all of which have been completed within the last twenty, and not exceeding twenty-five years.

Vessels, timber, cotton, &c., have been repeatedly thrown on the strand, and are in all cases claimed by the Earl of Sefton as Lord of the Manor; he formerly specially employed one of his tenants living on the edge of the river to take up wrecks cast thereon, and to whom he gave a written authority to act. At present his lordship has no person particularly deputed to that office, but still the claim is upheld.

Records of Manorial Courts at Croxteth.

It is very doubtful if royal fish have been taken upon the shore

* See "Annals of Liverpool," *Gore's Directory*, 1835. Note.—That about the year 1822 or 3, there was an assize trial between the occupiers of the land and Mr. Leigh, respecting his right to the tithe. Mr. Leigh got a verdict in his favour.—A. H.

within the recollection of any persons now living (1828). One or two instances are mentioned of fish being caught hereabouts, but the fact is so uncertain, that no absolute reliance can be placed upon the information.]

The following are the names of the owners of property on the edge of the river :—

John Moss, Esq. Grounds attached to his house, "Otters-pool."

The strand purchased from the Earl of Sefton to low water mark.

The grounds are bounded on the river front by a stone wall, the north end of which has frequently been added in consequence of the adjoining banks being destroyed and partly exposing this land to the effects of tide.

The Right Hon. Earl of Sefton. Jericho estate.

These lands considerably encroached upon, in consequence of no wall being erected for their protection.

Messrs. Wm. and Alex. Smith. Land.

[Late Mr. Hughes, or Mr. Bunnell, a butcher.]

No protection against the tide, land much encroached upon.

Mr. William Smith. Land.

Strand purchased by Mr. Smith.

[Strand in front of both Mr. Smith's lots belongs to Lord Sefton. 1828.

They do not possess the strand. 1839.

On comparing notes, it would seem that Messrs. W. and A. Smith did *not* purchase the strand in front of their joint lot; but that W. Smith did buy that in front of his own.—J. B., 1857.]

Some years ago Mr. [John] Montgomery, the then owner of this land, built a strong stone wall to protect the banks against the tide; subsequently having been thrown down, it was re-erected, but has been again destroyed, and a considerable portion of land washed away.

The executors of the late William Woodhouse. Land.

[Late Mr. Hughes's, called Dickenson's Dingle.

The strand belongs to Lord Sefton, acknowledged by Mr. W. to E. Eyes, 1st August, 1828.

Mr. W. did not purchase the strand. 1839.]

This land not being protected is encroached upon by the tide; but the greatest part of the front not being so elevated, is less affected than the adjoining lands.

Mr. John Clegg [should be Cragg.] Land [late Dr. Crompton's.]

[Mr. Cragg has not made any embankment against the tide, the consequence is a continued wearing away of the land.]

Open to the beach.

[The strand claimed by Mr. C., *doubtful.*]

Mr. Sothern. House and gardens.

Mr. John Fletcher. Land.

Wall built in front, and Mr. Fletcher states that the parties here have purchased the strand from Lord Sefton.

[Mr. Fletcher bought from Mr. Beckwith.]

Private Road.

Mr. James Dempsey. Land.

[Mr. Dempsey has embanked and taken from the beach in front, — yards on the average.

The strand in front of this land belongs to———.]

Joseph Brooks Yates, Esq., M.P.,* and other Trustees under the will of the late Rev. John Yates. Land.

The strand in front owned by the Trustees.

[Mr. Yates purchased from Lord Sefton the estate called the Dingle, with the right of shore to low water mark. Subsequently he sold part to Mr. Cropper, but reserved the right of shore. On the rocks called Knott's Hole are fishyards belonging to Mr. Yates, let to John Knight, of —— Street, near the Potteries, who has rented them about nine years (1828). Mr. Cropper embanked his front, and, perhaps, took part of the strand, but it does not appear more than to make an uniform line of front. The remainder of the frontage of Mr. Yates's property is as it has been for a length of time, except the front of Dingle vale which has now an embankment across it.]

Mr. John Cropper. Land.

Mr. Cropper, the owner of the strand, by purchase from the late Rev. J. Yates.

A wall erected about the line of high water.

Mr. Freme, or the executors of the late J. R. Freme. Land.

Strand in front reserved by Lord Sefton.

[Whilst the property of Mr. Freme was in the hands of Mr. Garnett,

* This gentleman never was in Parliament; his brother, John Ashton Yates, represented Carlow.

a sea wall was built, and it would appear that part of the strand was then enclosed, but, Mr. G. says, not more than the tides had previously washed away. The stone for building the wall was taken from the strand, and no compensation was given for the land taken in or stone got. The strand retained by Lord Sefton, who is restricted from any other application than for public docks. 1828.]

A wall erected about the line of high water.

Ambrose Lace, Joshua Lace, jun., John Tomkinson, Samuel Holme and James Holme. Land, strand, docks, &c.

The Ellesmere and Chester Canal Co. Docks, quays, &c.

Lord Francis Egerton. Wharf, docks, &c.

Sir Thomas Brancker, Knight, Richard Leyland, and Alexander Maxwell, Esqrs., Trustees of the Harrington Dock Co. Docks, quays, &c.

The whole of these erections are upon the strand.

The Trustees of the Docks, Liverpool. Graving docks, Brunswick half-tide basin, &c., wet dock, Brunswick basin and half-tide dock, part of Queen's dock, basins, yards, wharfs, quays, &c.

The whole of these erected upon the strand, and commenced upon about the year 1814, under the authority of Parliament.*

Township and Parish of Liverpool.

The entire river front of this township, with the exception of a small part of its northern boundary, is wholly occupied with piers, quays, basins, docks, &c., embanked and erected at various times, under the authority of Parliament, by the Corporation and Trustees of the Docks, and each successive inclosure appears to have been carried to the line of low water, and in many places even far beyond it into the bed of the river. The Corporation and Trustees also own all the land abutting the river, with the exception of a small frontage about the centre belonging to the trustees of the late Duke of Bridgewater.

* For other information respecting Toxteth see "The Former and Recent "Topography of Toxteth Park." *Proceedings of the Architectural and Archæological Society*, 16th Oct., 1867.

The line of low water has undergone considerable change between about the entrance to George's Dock and the southern boundary of this township.

The Corporation of Liverpool own and exercise all the manorial rights.

Township of Kirkdale, Parish of Walton-on-the-Hill.

The general line of high water, in part of this township, has been for the last twenty-five years gradually undergoing considerable change. Previous to that period the lands abutting the shore were subject to great waste from the wash of tide water, but, except on extraordinary occasions, they have since that time been free from this, in consequence of the progressive elevation of the shore (by the deposit of alluvial matter) which the ordinary springs do not now reach. The line of low water has changed very slightly.

The Right Honourable the Earl of Derby is owner of almost all the land fronting the river, part of which he has let on building leases; those of the lessees who first commenced inclosing their grants, generally extended their fences to the line of high water, and it was intended to continue one uniform line of frontage, but subsequent tenants finding that the tide wash was undergoing great alteration followed that line, and have enclosed a considerable portion of strand.

The Right Honourable the Earl of Derby is Lord of the Manor, and exercises the usual rights. Courts are regularly held.

[He sells sand and gravel from the strand, claims wrecks, is paid for permission to establish bathing machines on the strand.

Lord Derby and Mr. Leigh own all the land on the edge of the river. 1839.

The lands between Beacon's Gutter and about Sandhills Lane, or somewhat beyond, have been much encroached upon by the tide, as appears by the remains of the rails and stoops put down about twenty years since, part of which are now to be seen. Since Lord Derby

began to let the land on lease, and parties have erected walls in front of their respective grants (which I suppose included the strand they have taken), the drift sand has accumulated against the walls, and of course thrown back the line of high water. The continuation of the works in Liverpool is now causing that part of the shore lying between the boundary of Liverpool township and about the south end of Mr. Miller's property to silt up, and become grass land, with every prospect of having the ordinary tides excluded altogether in a few years. E. E., 1839. Low water does not undergo any material change.]

The following are the names of the owners of lands, &c., on the edge of the river :—

Beacon's gutter.

John Shaw Leigh, Esq. Land, cottage, and garden.

Mr. Leigh claims the strand in front, and intends to enclose to about 70 yards next to Victoria Street.

Sandhills road.

John Shaw Leigh, Esq. Land.

Exors. of the late E. Molyneux. Land.

John Shaw Leigh, Esq. Land.

About 10 yards in width has been lost from the front of these properties within the last twenty years. [Remains of the rails put down by the late Mr. Leigh twenty years ago are still to be seen. 1839.]

The Right Honourable the Earl of Derby. Land.

John Kilshaw. Land and buildings.

Michael Ashcroft. Houses and land.

A wall built in front of these by Mr. Ashcroft, and a small part of the strand enclosed.

Road leading to the toll-bar.

Mr. Hall. House and land.

Mr. Highfield. House and land.

Mrs. Sarah Leech. House and land.

A wall built in front of these properties by Mr. Hall, the original lessee, and about the line of high water.

William Cantrill. House and land.

William Kermode. Two houses and land.

——— Pierpoint. House and land.

William Kermore. Two houses and land.

William Reeves. House and land.

Messrs. George Booth and Joshua Walmsley. Two houses and land.

Messrs. Booth and Walmsley. Land.

W. C. Thompson. Land.

Road—Brunswick place.

Messrs. Booth and Walmsley. Two houses and land.

Joseph Wharton. House and land.

Mr. G. Booth. Two houses and land.

A wall built in front of these properties about the line of high water by Mr. Hall, the original lessee.

William Harrison. House, &c.

Messrs. Booth and Walmsley. Land.

Mr. Norris. Three houses and land.

William Banks. House, &c.

William Bickerstaff. House and land.

Private road.

William Spurstow Miller. House and land.

A portion of the strand enclosed in front of these.

James Queen. House and land.

William S. Miller. Six houses and land.

Captain John Brown, R.N. House and land.

James Sharman. Two houses and land.

A portion of the strand enclosed in front of these.

Captain Anstice. House and land.

Mr. Dirks. House and land.

Brook dividing townships.

Bootle-cum-Linacre Township, Parish of Walton-on-the-Hill.

The lands abutting the river in this township were formerly subject to the inroad and suffered greatly from the effects of tide water. Within the last twenty-five years, so great has been the change here in the line of high water, that the tide

is now entirely excluded from parts over which it then flowed, and the strand is so raised by drift sand and alluvial deposit, as likely, in a few years, to be available for building purposes.

The Right Hon. the Earl of Derby is owner of all the lands on the edge of the river, the greater part of which he has disposed of under lease for lives; and as each succeeding tenant follows the gradually receding tide mark and encloses thereto, a very irregular line of frontage is occasioned. This is about to be remedied by taking in such parts as are within and forming a more even boundary to the shore. A very considerable quantity of strand has been already enclosed.

The Trustees of the Liverpool Docks have erected two land marks upon the strand, nearly opposite to the church.

The Right Hon. the Earl of Derby is Lord of the Manor, holds courts, and claims the exclusive right to the strand.

[Is paid for allowing bathing on the shore, claims wreck, disposes of sand and gravel from the beach, and has enclosed land below the line of high water. 1839.]

Names of parties whose properties are on the edge of the river:—

Brook dividing townships.

William Spurstow Miller. Land.

Wm. S. Miller. House, offices and land.

A large tract taken from the strand and enclosed by a stone wall; the drift sand often accumulates to the top of the wall, and is as frequently removed, grass and marsh forming in front. The house, &c., is built upon the strand.

Public road to the canal. Miller's bridge.

James Queen. House and grounds.

Jesse Hartley. House and grounds.

Part of the strand enclosed.

The executors of Richard Finlow. Land used as a garden.

The executors of Richard Finlow. House and garden.

The house built upon the strand.

Private road to Mr. Finlow's house, &c.

The executors of Richard Finlow. Six houses, &c.

Houses built partly on the strand.

The executors of Richard Finlow. Land.

The executors of Richard Finlow. House, &c.

Built partly on the strand.

Joseph Crossley. Land, &c.

Mr. Hinde. Land, &c.

Thomas Murray Gladstone. Land, &c.

William S. Miller. Land, &c.

Part of the strand enclosed.

John Waring. Cottage-house and garden.

This cottage built wholly on the strand.

John Waring. Two cottages.

A considerable portion of strand taken in front of these properties.

John Waring. House, &c.

John Waring. Cottage, &c.

Thomas Peters. Garden.

Part taken from the strand.

Marsh appears to be forming on the beach.

John Chadwick. Three houses and land.

These are built partly on the strand, and a large tract likewise taken in.

Henry Roose. House and land.

Strand enclosed in front.

Thomas Peters. Land.

James Clements. Three houses and land.

Houses built partly on the strand.

Marsh appears to be forming on the beach.

James Liniman, jun. House and land.

Public Road.

The Right Hon. the Earl of Derby. Land, on which is erected the toll bar.

Brook.

William Jones. Land.

A considerable portion taken from the strand.

Isaac Wynne. Two houses and land.

Houses built upon the strand.

Public Road.

Thomas Lyon. House and land.

Thomas Robinson. House and land.

James Orme. Two houses and land.

The Rev. J. Brooks. House and land.

Luke Hamer. House and land.

John Jones. House and land.

These lands were originally enclosed from the strand rather below the line of high water. The sand has now drifted in front so as to bury the walls, and banks have formed.

John Waring. Land and cottages.

Open to the beach.

Road to Rimrose, and brook dividing townships.

Township of Litherland. Parish of Sefton.

This township is situated near the entrance into the Mersey, and although much exposed to the sea, the lands abutting it do not appear to suffer so much as formerly. This may be accounted for by the change which has been gradually and imperceptibly taking place in the direction of the principal stream entering into the river, and to the constant accumulation of drift sand in some degree making up the waste occasioned by the tide water. No material changes take place in the tide marks.

The Right Hon. the Earl of Sefton is Lord of the Manor, for which a court is regularly held. His lordship claims also the exclusive right to the strand, and in several sales lately made adjoining thereto, purchasers are restricted from using it except for bathing upon, passing over, and taking sand, gravel, &c., according to the conditions of their respective agreements.

Names of the owners of land fronting the sea:—
Rimrose brook, boundary of township.
Mr. James Muspratt. House and land.
Mr. Henry Francis Penny. House and land.
Part of the strand enclosed.
Private Road.
Mr. Robert Bickersteth. Land.
Mr. William Potter. Land.
Open to the beach.
Private Road.
Messrs. John Bibby and William Potter. Land.
Private Road.
Mr. Thomas Avison. Land.
Mr. John Kilshaw. Land.
Enclosed in front by rails about the line of high water.
Thomas Belshaw. Land.
George Crosfield. House and land.
Thomas Avison. House and land.
Miss Avison. House and land.
Enclosed in front by rails about the line of high water.
Robt. Lund Roberts. Two houses and land.
Rev. John Jones. House and land.
Mr. John Kilshaw. House and land.
Open to the beach.

Township of Great Crosby. Parish of Sefton.

This township is below the entrance or mouth of the river, and lies open to the sea.

The land, although much exposed, is little affected, except about Crosby Point, by its waters, in consequence of being in part protected by a barrier of sandhills, and the drift sand filling up the waste occasioned by the wash of the tide.

The line of high water seems to be receding, but that of low water does not materially alter.

There are not any enclosures on the strand.

William Blundell, Esq., is Lord of the Manor; claims the exclusive right to the strand; and, unless under special agreement, restricts persons owning lands abutting from the use of it, except passing over.

Proprietors of lands on the edge of the sea:—

Great George Road.

Proprietors of the Crosby Sea-bank Hotel and Cottages. Hotel and land in front.

The same Proprietors. Six cottage-houses and land.

John Kilshaw. Land.

Thomas Smith. House and land.

Robert Rawstorne. House and land.

John Kilshaw. House and land.

Mrs. Myers. House and land.

—— Fisher. House and land.

South Road.

John Broadbent. House and land.

Margaret Bird. House and land.

John Van Zeller. House and land.

John Kilshaw. House and land.

Margaret Bird. Two houses and land.

The Rev. Fred. Anson. House and land.

Margaret Sharrock. House and land.

Elizabeth Brown. House and land.

John Kilshaw. House and land.

Margaret Colley. House and land.

John Van Zeller. Three houses and land.

William Watmough. House and land.

John Williams. House and land.

Thomas Mellor. House and land.

Margaret Bird. House and land.

Richard M. Beckwith. House and land.

George Holden. House and land.

Mrs. Jones. House and land.
Miss Mary Rowe. Two houses and land.
Mrs. Ellen Gaskell. Two houses and land.
Miss Robinson. Two houses and land.
—— Webster. House and land.
Joseph Holland. House and land.
Joseph Mason. Two houses and land.
Major Roe. House and land.
Kent Street.
William Lupton. Three houses and land.
Edward Gillon. Land.
Mary Hartley. Land.
Edward Burne. Land.
John Postlethwaite Padley. Land.
Charles Padley. Land.
Edward Gillon. Land.
Mary Hartley. Land.
Edward Burne.
Thomas Aquila Dale and Richard Harbord. Land.
—— Chaffers. Land.
The Rev. — Formby. Land.
Charles Horsfall. House and land.
Private Road.
—— Greenall. Bath and land.
James Williams and Co. Land.
Ralph Greenhough and Thomas Lowry. Land.
Thomas Tasker. Land.
William Blundell, Esq. Sandhills and warren.

Little Crosby Township, Parish of Sefton.

This township is situated in the estuary of the Mersey, and from its exposed situation is considerably affected by both winds and tide. The lands abutting the shore are composed of sandhills, and subject to constant change, but

it does not appear that much is destroyed, the drift sand compensating for the wash of the tide. The river Alt discharges its waters at the northern boundary, and runs along the entire front at no great distance from the line of high water. On the outside of it a large enclosure has been made by Lord Sefton.

About Crosby Point the trustees of the Liverpool Docks have a small piece of land on which they have erected a lighthouse; the rest of the frontage belongs to the Right Honourable the Earl of Sefton and Wm. Blundell, Esq.

Mr. Blundell is Lord of the Manor, and claims the exclusive right to the strand, and holds a court regularly.

Township of Altcar, Parish of Altcar.

This township has a very limited frontage and lies partly in a bay bounded by the River Alt and Formby Point. The lands abutting the shore are of the same description of dreary sand hills as adjoining townships, but here not much affected by the tide.

An enclosure of about 150 acres of strand at the mouth of the Alt was commenced upon by the Commissioners of the Alt Drainage, about forty years ago, to protect their floodgates, and considerably extended and completed by the late Earl of Sefton.

The Right Honourable the Earl of Sefton is Lord of the Manor, and exercises all the usual rights.

Formby Township, Parish of Walton-on-the-Hill.

This township lies at the northern boundary of the estuary or bay of Liverpool, and it is to the turn of the coast here, called Formby Point, that the conservancy of the River Mersey is proposed to be extended.

The land bounding the shore in this district is composed of ridges of sand in its wildest form, and being greatly exposed

to the action of winds and tides suffers considerably. These effects are perceptible in the destruction of large quantities of land in the vicinity of the landmark now in ruins near the edge of the shore, and about the life-boat house, which, when erected thirty-five years ago, stood one hundred yards inland, but now projects about three hundred yards before the hills and line of high water; in this period also at least three hundred yards have been taken from before the landmark.

The whole of the lands on the edge of the sea belong to the devisees of the late Rev. R. Formby, except the life-boat house, which is the property of the trustees of the Liverpool Docks.

The manorial rights are owned jointly by the executors of the late Charles Blundell, Esq., and by the devisees in trust under the will of the Rev. R. Formby. Courts are regularly held, but no authority appears to be exercised on the strand.

[Blundell owns two-thirds, and Formby one-third. The (? stone) embankment at the mouth of the River Alt, made by a Commission and by Lord Sefton about forty years ago, and taken from the shore about 150 acres. When the life-boat house was built, it stood at least 100 yards above high water mark, that is, amongst the sand hills; it is now 30 to 40 yards in front of the hills. All this land has been destroyed in about thirty-five years. NOTE.—That the burial ground amongst the sand hills near the boat house is used by the *Catholics*. 1839.]

LIVERPOOL, 14TH DECEMBER, 1839.

ON CURRENT GERMAN THALERS.

By Samuel Smith, Jun., Esq.

(Read 24th February, 1870.)

The whole of the Coins to which I invite the attention of the Society this evening, have been issued since 1857; but before referring to any of them particularly, I wish to explain what makes this date the starting point for a collection of the present German currency.

Previous to the dissolution in 1806 of the so-called "Holy "Roman Empire," Germany, in addition to its large and well-known divisions, was further parcelled out amongst a number of petty ecclesiastics, princes, counts, and free towns, most of them attached more or less to some one or other of the larger States; but possessed of a voice, or part of a voice, in the general Diet, and enjoying in minor matters, the right of coining included, an almost complete independence. To these must also be added the nobles of the Empire, who, although they had no hereditary sovereign states, had obtained from the emperor, along with the title of Princeps, or Comes Sacri Romani Imperii, the permission to strike coins bearing their names and arms. Altogether, at the above date, there were in existence between two hundred and three hundred separate states, towns, and princes, who had, and most of whom exercised, the right of issuing a currency of their own. I have specimens of about one hundred and thirty.

Amidst so many different interests, it will be easy to conceive that the standard of even the larger silver coins was very varied. The confusion reigning with regard to the smaller issues was indescribable; and it was no uncommon thing to find the coins of one little state decried and refused currency by its nearest neighbours. After the collapse of

the old and clumsy fabric of an Empire, when Germany was concentrated, by the Act of Confederation of 1815, into thirty-nine Sovereign States, the smaller ones being mediatised, and a settled peace encouraged the extension of its commerce, the inconvenience of this want of a common monetary medium was plainly felt. In 1837 a first attempt to lessen it was made by the introduction of the so-called 14-thaler standard. This proved so successful that, in 1856, after the adoption by the Zollverein, (or Customs Union of Germany,) of the French half-kilogramme (under the name of the new Zollverein Pound) as basis of their weights, a convention was called together at Vienna to try and arrange a further simplification of the currency; and on the 24th of January, 1857, an agreement was signed in that city between the representatives of Austria and Leichtenstein on the one hand, and of the Zollverein on the other, stipulating:—

"That the Zollverein pound, founded on the French half-"kilogramme, and equal to 7,717 grains troy, shall be taken "by the contracting States as the base of all their minting "operations.

"That silver shall be taken as the standard, and that the "contracting parties shall adopt one or other of the three "following currencies: *first*, The 30 thaler-fuss, or standard "of 30 thalers to the pound of fine silver," adopted by all the members of the Zollverein now comprised in the North German Confederation, with the exception of Saxe-Meiningen, Saxe-Coburg-Gotha, Nassau, and Frankfort. *Second*, "The "45 gulden-fuss, of 45 gulden or florins to the pound," adopted by Austria and Leichtenstein. *Third*, "The 52½ "gulden-fuss, of 52½ gulden to the pound," adopted by Baden, Bavaria, Frankfort, Hesse-Darmstadt, and Hesse-Homburg, Hohenzollern (under Prussia), Nassau, Saxe-Meiningen, and Saxe-Coburg-Gotha.

"That to facilitate commercial operations between the "contracting parties, coins shall be issued called 'Vereins-"'münze,' Union-money; viz., a one-thaler piece, worth $1\frac{1}{2}$ "florin of Austria, or $1\frac{3}{4}$ gulden of the South German "currency, and two-thaler-pieces in proportion.

"That these Union coins shall be composed of $\frac{9}{10}$ths fine "silver and $\frac{1}{10}$th of copper alloy; so that 27 Vereins-thaler or "$13\frac{1}{2}$ double thalers, should weigh a pound."

The first fifty-nine pieces here described are Vereins-thaler, struck in compliance with the above treaty. They form a collection complete with few exceptions, so far as I know, of all the types so issued up to the beginning of this year. The collecting of them has been a source of much interest to me during the last four years, and I gladly take this opportunity of acknowledging the great assistance I have received in this pursuit from another member of the Historic Society, Mr. Benas, to whose kindness I am indebted for nearly half their number.

The thirty-two States and four Free Towns composing the German Confederation in 1857, comprised the following—

1 *Empire*—Austria.

5 *Kingdoms*—Bavaria, Hanover, Prussia, Saxony, and Würtemberg.

1 *Electorate*—Hesse Cassel.

7 *Grand Duchies*—Baden, Hesse-Darmstadt, Luxemburg, Mecklenburg-Schwerin and Mecklenburg-Strelitz, Oldenburg and Saxe-Weimar-Eisenach.

9 *Duchies* — Anhalt-Dessau-Cöthen, Anhalt-Bernburg, Brunswick, Holstein, Lauenburg, Nassau, Saxe-Coburg, Saxe-Meiningen, and Saxe-Altenburg.

8 *Principalities* — Leichtenstein, Lippe-Detmold and Schaumburg-Lippe, Reuss Greiz, Reuss Schleiz, Schwarzburg-Rudolstadt, Schwerin-Sondershausen, and Waldeck.

1 *Landgraviate*—Hesse-Homburg.

4 *Free Towns*—Bremen, Frankfort, Hamburg, and Lübec.

Of these twenty-eight only are represented in this collection by Vereins-thaler, arranged alphabetically under the names of the States. The exceptions are—Lippe-Detmold and Mecklenburg-Strelitz, of which there are, I believe, coins, although I have not yet seen them*; Bremen, which is represented by three very handsome coins, called Thaler-Gold—they are of finer silver than the Union-coins, having only $\frac{1}{12}$ of alloy; Holstein and Lauenburg, for which no silver coins have been struck since 1830; Luxemburg, no silver coins since 1815; Hamburg, no large silver since 1813; and Lübec, no coinage whatever since 1798. In addition to the Vereins-thaler and to the three coins of Bremen already referred to, there is also a half-medallic thaler of Vienna, of same weight, and probably of same standard as the Bremen pieces.

It is not easy to impart to the uninitiated an idea of the fascination which the study of German coins exercises over the thorough-going student. The charm of the ancient coins of Greece and Rome does not lie exclusively in their beauty as works of art, nor even in the generally admirable portraits they present of their issuers; they further provide us with an endless series of illustrations of the historical events, the mythology, and the fashions of their various countries. Of all modern European nations, the Germans alone appear to have inherited to any extent this taste in coining, and fostered as it was by the genius of the people, and by the numerous territorial divisions of the country, we have as a result, most curious records of historical and private events, varying in their importance from victories of European interest down to petty family squabbles. The coins of the time of the great wars following the Reformation are especially interesting. Hoping to be able at some future date to produce a more important illustration of this, than the small

* See Addenda at end of paper.

collection now in question can claim to be, I still thought it might interest the Society to see what a little attention and taste can do towards a combination of the agreeable with the useful. In this respect at least, it seems to me, our own country might follow with advantage the example of these little German potentates; for whilst our coinage has maintained, with very little exception, a constant reputation for the excellence of its standard, and for its regularity, we have comparatively few examples of artistic workmanship or of historic interest to point to, and not one in the period comprising these pieces.

Of the sixty-three Thalers herein described, no fewer than sixteen commemorate events of interest to the German Fatherland, or at any rate to some of its divisions, and all—that of Vienna perhaps excepted—are intended for circulation. Taking these sixteen as they come in order, the first worthy of note is—

No. 1, of Leopold Frederick, Duke of Anhalt. It commemorates the re-uniting, in 1863, of all the states of Anhalt under him as sole duke, on the death of Alexander Charles, last male of the line of Bernburg. It is inscribed on the Rev. "HERZOGTHUM ANHALT, GETHEILT (divided) 1603; VEREINT "(united) 1863." The law of primogeniture did not come into force in Germany, in respect to the succession to sovereign states, until the 18th century. On the death of a prince leaving a number of sons, they usually either divided the paternal possessions, as in the case of Anhalt, or else reigned conjointly, all their names, and frequently all their portraits, appearing on the coins. As curious illustrations of this, I may refer to the well-known Acht-Brüder thaler of Saxe-Weimar, struck by the eight sons of Duke John who died in 1605; on one, the bust of the eldest son appears surrounded by the busts of his seven younger brothers; on another, four busts appear on each side. Joachim I, prince of Anhalt,

died in 1603, leaving five sons. One son took an allowance instead of his share of the lands, the others divided the state and founded the separate lines of Dessau, Bernburg, Cöthen, and Zerbst. The line of Zerbst became extinct before the dissolution of the empire, that of Cöthen followed in 1849, and finally that of Bernburg in 1863, when Leopold Frederick, then reigning duke of Anhalt-Dessau-Cöthen, became sole sovereign of the entire principality.

Nos. 14, 15, and 16, of the ex-king George V of Hanover, commemorate the fiftieth anniversaries of two events of the stirring year 1815; the first is dedicated to the conquerors at Waterloo (DEN SIGERN BEI WATERLOO GEWIDMET AM 18 "JUNI, 1865) on the 18th June, 1865, and a specimen of it was given, I believe, to every surviving Hanoverian soldier who had taken part in the battle. The remaining two refer to Prussia's cession of East Friesland to Hanover, on 15th December, 1815. I have not yet been able to obtain any explanation of the "tree, &c.," on No. 16, nor of the inscription above it "EALA FRYA FRESENA": perhaps some other member of the Society may be able to enlighten us. This piece which is the rarest in the collection, costing already four thalers in Germany, is described in the German Catalogues as the Thaler "MIT DEM UPPSTALLBAUM."

Nos. 23 and 25 commemorate respectively the 25th anniversaries of the reigns of Frederic Francis, grand-duke of Mecklenburg-Schwerin, and of Adolph, duke of Nassau.

No. 28 was struck on the occasion of the coronation of the present king and queen of Prussia, 1861.

No. 32, likewise Prussian of 1866, is called the "Sieges," or Victor's Thaler, the wreath of laurel round the king's head referring to the Prussian successes of that year.

No. 46 commemorates the twenty-fifth anniversary of the reign of duke Ernest of Saxe-Coburg-Gotha, brother of the late Prince Consort.

Nos. 56, 58, and 59, all of Frankfurt, commemorate, (1) the festival in honour of Schiller, held in that city in Nov., 1859, on the occasion of the hundredth anniversary of the poet's birth; (2) the first general meeting of the German Rifle Clubs, in July, 1862; (3) the meeting of all the German sovereigns (except Prussia), in August, 1863, when the train was laid which exploded in 1866, so disastrously for some of those then assembled there. The building represents, I believe, the Rathhaus or town hall of Frankfurt.

The remaining four pieces, as already said, are not Vereinsthaler, but belong to the same period. No. 60, of Bremen, in 1863, commemorates the fiftieth anniversary of the battle of Leipzic, when Germany was freed from Napoleon's yoke.

No. 61, also of Bremen, is of more local interest, being struck on the erection of a new Bourse in 1864. Its motto is very apt, GOTT SEGNE HANDEL UND SCHIFFAHRT, "God "prosper commerce and shipping."

Nos. 62 and 63 are companions to No. 58, the first being a memorial of the second general meeting of Riflemen at Bremen, in 1865; and the second of a third similar meeting at Vienna, in 1868 (they appear to be held triennially), its motto expressing, I presume, the desire of the German subjects of Austria to be again united to the Fatherland, from which the Treaty of Prague excluded them. WIR WOLLEN SEIN EIN EINIG VOLK VON BRÜDERN, "We desire to be a "united nation of brothers."

Strictly speaking, these are all the memorial pieces, German "Gedenk-thaler," in the collection, but there are five others not unworthy of notice. First, No. 33, a thaler of the usual Prussian type, without wreath, dated 1867, which the letter B under the king's head shows to have been struck in the newly acquired province of Hanover. There are similar pieces struck at Frankfurt with the letter C. Second, No. 8 of Anhalt-Bernburg, 1861; No. 30 of Prussia, 1862; Nos. 38

and 41 of Saxony, 1857 and 1860, all with the inscription SEGEN DES BERGBAUES "blessing of the mine." They are specimens of a description of coins peculiar to Germany, not often issued now, but which in old times were frequently emitted in those States possessing mines, and are known as "Gruben" or "Ausbeute-thaler," mining or profit thalers. They are struck from silver obtained in the mine named on them, and were issued to testify to its productiveness, and to mark when the working of it paid.

There is also a curious circumstance which I may mention with regard to the coins of Reuss. All the four princes represented in the collection, bear, you will perceive, the name of Henry. Henry XX and his son Henry XXII of the elder line, and Henry LXVII and his son Henry XIV of the younger line. All the males of this family from the eleventh century down have borne the name of Henry alone, in memory, it is said, of their relationship to the emperor Henry IV. At first they were distinguished by some nickname, referring either to their moral, or to their physical peculiarities; but as the family increased the stock of descriptive adjectives fell short, so, to prevent confusion, an agreement was come to in 1664 by the heads of the family that, for the future, they should all be numbered, the numbers to run through the whole family generally; for example, Henry I has say four sons, Henries II, III, IV, and V—whichever of these is first blessed with an heir, would name him Henry VI, the next little male stranger who arrived would be Henry VII, and so on. No definite limit was put on the numbers, but it was arranged that they should mount on until a sufficient number of the older princes died off to allow a fresh series to be started. This last item of the treaty was, however, not strictly carried out; the elder line entered on a new series in the beginning of the last century, whilst the younger continued the original one, with tolerable regularity, down

to the beginning of the present, one prince attaining the respectable figure of LXXV.

The most artistic coins in the collection, both in point of design and of execution, appear to me to be the coins of Bavaria, including the beautiful "Muttergottes-Thaler" of the present king, the only one by-the-bye with Latin titles, and those of Oldenburg, Prussia, and Bremen.

Seeing then from this small collection how many pleasant memorials may be provided by a little care and attention; memorials interesting to the present, as well as, we will hope, to future generations, and reflecting that, in the course of a reign which has extended over a period twenty years longer than that including all these coins, and has abounded in events as well worthy of commemoration as any mentioned in this paper, there has been no change except for the worse in our coins, that even Her Majesty's profile, as now represented on them, can hardly be termed a likeness, I hope you sympathise a little with me when I wish that we, as a nation, were not so markedly practical.

Description of the Thalers referred to in the foregoing Paper.

ANHALT.

1. LEOPOLD FREDERICK, 1817. Obv., Head to left, beneath it A. "LEOPOLD FRIEDRICH HERZOG VON ANHALT." Rev., Arms of Anhalt crowned, on two branches of oak; above "HERZOGTHUM ANHALT," and below "GETHEILT "1603—VEREINT 1863;" over the crown, in small letters, "EIN THALER 30 EIN PF. F." On edge, "GOTT SEGNE "ANHALT."

ANHALT BERNBURG.

2. ALEXANDER CHARLES, 1834-1863. Obv., Head to left, beneath it A. "ALEXANDER CARL HERZOG ZU ANHALT." Rev., Arms (12 quarters) crowned, with supporters and

collar of order. "EIN VEREINSTHALER XXX EIN PFUND "FEIN 1859." On edge, as No. 1.

3. Obv., In four lines in field, "SEGEN DES ANHALT. BERGBAUES 1861"; below, two mining hammers in saltire. "ALEXANDER CARL HERZOG ZU ANHALT." Rev., A crowned Bear walking on a crenelated wall, in which there is a door (arms of Bäringen) beneath A. "EIN "THALER XXX EIN PFUND FEIN." On edge, as No. 1.

AUSTRIA.

4. FRANCIS JOSEPH, 1848. Obv., Laurelled head to right, beneath it A. "FRANZ JOSEPH I., V. G. G. (Von Gottes "Gnaden) KAISER V. OESTERREICH." Rev., On the Imperial Eagle, Arms of Hapsburg-Lorraine, surrounded with the collar of the Golden Fleece. "EIN VEREINS- "THALER XXX EIN PFUND FEIN 1858." On edge, "MIT VEREINTEN KRAEFTEN."

5. Similar to No. 4, but head older, with more whiskers and moustache; date 1867.

BADEN.

6. FREDERICK, 1852. Obv., Head to right, without whiskers; "FRIEDRICH GROSHERZOG VON BADEN." Rev., Arms crowned, with supporters, and two orders, on mantle. "EIN VEREINSTHALER XXX EIN PFUND FEIN 1859." On edge, "MUNZVERTRAG VOM 24 JANUAR 1857."

7. Similar to No. 6; but Head to left, and with large whiskers; date 1866.

BAVARIA.

8. MAXIMILIAN II, 1848-1864. Obv., Head to right, under neck "C. VOIGT." MAXIMILIAN II, KOENIG V. BAYERN." Rev., Arms crowned, with supporters; "EIN VEREINS- "THALER XXX EIN PFUND FEIN 1859." On edge, "GOTT "SEGNE BAYERN."

9. LOUIS II, 1864. Obv., Head to right, under neck "C. VOIGT." "LUDWIG II, KOENIG V. BAYERN." Rev. and edge as No. 8; date 1869.

10. Obv. as No. 9; "LUDOVICUS II, BAVARIÆ REX." Rev., The Virgin Mary seated on clouds, crowned, and at her foot the crescent, holding in the right arm the Child, with the globe, and in her left hand the sceptre; "PATRONA "BAVARIÆ." No date. On edge, "XXX EIN PFUND "FEIN."

11. Similar to No. 10; but under the crescent, in small figures, 18—68.

BRUNSWICK.

12. WILLIAM, 1830. Obv., Head to right beneath B; "WIL- "HELM HERZOG Z. BRAUNSCHWEIG U. LUN." Rev., Arms (12 quarters) on mantle crowned, with order; "EIN VEREINSTHALER XXX EIN PFUND FEIN 1866." On edge, "NEC ASPERA TERRENT."

HANOVER.

13. GEORGE V, 1851-1866. Obv., Head to left, on neck "BREHMER F," below B; "GEORGE V., V. G. G. (Von "Gottes Gnaden) KOENIG V. HANNOVER." Rev., Arms crowned, with supporters and two orders, round the shield on ribbon, "NUNQUAM RETRORSUM," and below on a ribbon, ornamented with rose, shamrock and thistle, "SUSCIPERE ET FINIRE." "EIN VEREINSTHALER XXX "EIN PFUND FEIN 18—66." On edge, as No. 12.

14. Obv., as No. 13. Rev., In 7 lines, between two branches of laurel; "DEN SIEGERN BEI WATERLOO GEWIDMET "AM 18 JUNI 1865." On edge, as No. 12.

15. Obv., as No. 13. Rev., In 7 lines, between two branches of oak; "ZUR 50 JÄHRIGEN VEREINIGUNG OSTFRIES- "LANDS MIT HANNOVER 1815, 15 DEC. 1865." On edge, "EIN THALER 30 EIN PFUND F."

16. Obv., as No. 13. Rev., A warrior in complete armour, with sword, battle-axe and spear, standing under a tree; above, the words "EALA FRYA FRESENA," round, "ZUR

" ERINNERUNG AN DIE FEIER DES 15 DEC. 1865." On edge as No. 15.

HESSE-CASSEL.

17. FREDERICK WILLIAM I, 1847-1866. Obv., Head to right, early specimens have on neck C. P.; " FRIEDR. " WILHELM I, KURFÜRST V. HESSEN." Rev., Arms (9 quarters), with order, on crowned mantle; " EIN " VEREINSTHALER XXX EIN PFUND FEIN 1863." On edge, " GOTT MIT UNS."

HESSE-DARMSTADT.

18. LOUIS III, 1848. Obv., Head to left; " LUDWIG III, " GROSHERZOG VON HESSEN." Rev., Arms crowned, with supporters; " EIN VEREINSTHALER XXX EIN PFUND " FEIN 1863." On edge, " MUNZVERTRAG VOM 24 JANUAR " 1857."

HESSE-HOMBURG.

19. FERDINAND, 1848-1866. Obv., Head to right, on neck " C. SCHNITZSPAHN." " FERDINAND SOUV. (Souverainer) " LANDGRAF Z. HESSEN." Rev., Arms (8 quarters and shield of pretense), on crowned mantle. " EIN VEREINS- " THALER XXX EIN PFUND FEIN 1859." On edge, as No. 18.

LIECHTENSTEIN.

20. JOHN II, 1858. Obv., Head to right, below A; " JOHANN II, FÜRST ZU LIECHTENSTEIN." Rev., Arms (5 quarters and shield of pretense), with order of Golden Fleece, on crowned mantle. " EIN VEREINSTHALER XXX EIN PFUND " FEIN 1862." On edge, " KLAR UND FEST."

LIPPE-SCHAUMBURG.

21. ADOLPH GEORGE, 1860. Obv., Head to left, on neck " BREHMER F.," below B; ADOLF GEORG FÜRST ZU " SCHAUMBURG-LIPPE." Rev., Arms (4 quarters and shield of pretense), with three helmets and supporters; below on ribbon, "NOLI ME TANGERE." " EIN VEREINS-

"THALER XXX EIN PFUND FEIN 1865." On edge, "WIENER MUNZVERTRAG 24 JAN. 1857."

MECKLENBURG-SCHWERIN.

22. FREDERICK FRANCIS, 1842. Obv., Head to right, below A; "FRIEDRICH FRANZ V. C. G. GROSSH. V. MECKLENB.-"SCHW." Rev., Arms (6 quarters and shield of pretense), crowned, on a wreath of laurel. "EIN THALER "XXX EIN PF. F. 1864." On edge, "PER ASPERA AD "ASTRA."

23. Similar, but inscription on Rev. "ZUR FEIER 25 JÄHRIGER "REGIERUNG AM 7 MÄRZ 1867." On edge, "EIN "THALER 30 EIN PFUND FEIN."

NASSAU.

24. ADOLPH, 1839-1866. Obv., Head to left, on neck Z; "ADOLPH HERZOG ZU NASSAU." Rev., Arms crowned, with supporters; "EIN VEREINSTHALER XXX EIN PFUND "FEIN 1860." On edge, "MUNZVERTRAG VOM 24 "JANUAR 1857."

25. Obv., Head to left, laurelled, on neck "F. KORN"; "ADOLPH HERZOG ZU NASSAU." Rev., In wreath of oak, in three lines; "DEN 21 AUGUST 1864," and round, "ZUR FEIER 25 JAEHRIGER SEGENSREICHER REGIE-"RUNG." On edge, "EIN GEDENKTHALER XXX EIN "PFUND FEIN."

OLDENBURG.

26. NICHOLAS FREDERICK PETER, 1853. Obv., Head to left, on neck "BREHMER F," below B; "NICOLAUS FRIEDR. "PETER GR. H. V. OLDENBURG." (Grosherzog Von Oldenburg.) Rev., Arms (6 quarters and crowned shield of pretense), crowned, between a branch of oak and a branch of laurel. "EIN VEREINSTHALER XXX EIN PFUND "FEIN 1860." On edge, "EIN GOTT, EIN RECHT, EINE "WAHRHEIT."

PRUSSIA.

27. FREDERICK WILLIAM IV, 1840-1861. Obv., Head to right, below A; "FRIEDR. WILHELM IV, KOENIG V. "PREUSSEN." Rev., The Prussian eagle, with order, globe and sceptre, above a crown. "EIN VEREINS- "THALER XXX EIN FFUND FEIN, 1859." On edge, "GOTT MIT UNS."

28. WILLIAM I, 1861. Obv., Crowned and mantled busts of King and Queen to right, below A; "WILHELM "KOENIG AUGUSTA KOENIGIN V. PREUSSEN." Rev., The Prussian eagle crowned, above and below the letter W crowned, at each side A crowned, and in the four angles the letter R; above, "SUUM CUIQUE"; below, "KROENUNGS THALER 1861." On edge, as No. 27.

29. Obv., Head to right, below A; "WILHELM KOENIG VON "PREUSSEN." Rev. and edge, as No. 27. Date 1861.

30. Obv., as No. 29. Rev., In field in three lines, "SEGEN "DES MANSFELDER BERGBAUES"; round, "EIN THALER "XXX EIN PFUND FEIN 1862." On edge, as No. 27.

31. Obv., similar to No. 29, but head a little larger. Rev. and edge, also similar to 29, but eagle crowned and collar of order much smaller. Date 1864.

32. Similar to No. 31, but wreath of laurel round head. Date 1866.

33. Exactly similar to No. 31, but instead of A, B under head. (Struck at Hanover.)

REUSS-GREIZ.

34. HENRY XX, 1836-1859. Obv., Head to left, below A; "HEINRICH XX, V. G. G. AELT. L. SOUV. FÜRST REUSS" (Von Gottes Gnaden Aelterer Linie Souverainer Fürst Reuss). Rev., Arms (quartered), on crowned mantle, "EIN VEREINSTHALER XXX EIN PFUND FEIN 1858." On edge, "OMNIA CUM DEO."

35. HENRY XXII, 1859. Obv., Head to right, below A;

"HEINRICH XXII V. G. G. ÄLT. L. SOUV. FÜRST REUSS." Rev. and edge as No. 34, date 1868.

REUSS-SCHLEIZ.

36. HENRY LXVII, 1854-1867. Obv., Head to right, below A; "HEINRICH LXVII V. G. G. REG. FÜRST REUSS "J. L." (Von Gottes Gnaden Regierender Fürst Reuss Jüngerer Linie). Rev., Arms (four quarters) crowned, with supporters, on ribbon round shield, "ICH BAU AUF "GOTT," round, "EIN VEREINSTHALER XXX EIN PFUND "FEIN 1858." On edge, "MUNZVERTRAG VOM 24 "JANUAR 1857."

37. HENRY XIV, 1867. Obv., Head to right, below A; "HEINRICH XIV V. G. G. REG. FÜRST REUSS J. L." Obv. and edges, as No. 36. Date 1868.

SAXONY.

38. JOHN, 1854. Obv., Head to left, below F; "JOHANN "V. G. G. KOENIG VON SACHSEN." Rev., Arms crowned, with ribbon of order, on a mantle also crowned; above, "SEGEN DES BERGBAUES"; below, "XXX EIN 18-57 "PFUND F." On edge, "GOTT SEGNE SACHSEN."

39. Similar to No. 38, with the exception of the inscription on Rev., which is "EIN VEREINSTHALER XXX EIN PFUND FEIN 1859."

40. Obv. as No. 38, but under head B. Rev., Arms crowned, with supporters and order; below, on ribbon, "PROVI- "DENTIÆ MEMOR"; round, "EIN VEREINSTHALER XXX "EIN PFUND FEIN 1860." Edge, as No. 38.

41. Obv., as No. 40. Rev., Arms crowned, with two miners as supporters; above, "SEGEN DES BERGBAUES"; below, "EIN THALER 1860 XXX EIN PFD. F." Edge, as No. 38.

42. Similar to No. 40, but arms on Rev. smaller, and enclosed in an inner circle; date 1862.

SAXE-WEIMAR AND EISENACH.

43. CHARLES ALEXANDER, 1853. Obv., Head to left, below

A; "CARL ALEXANDER GROSSHERZOG VON SACHSEN." Rev., Arms crowned, with order on mantle also crowned; "EIN VEREINSTHALER XXX EIN PFUND FEIN 1858." On edge, "GOTT UND RECHT."

SAXE-MEININGEN.

44. BERNARD, 1803-1866. Obv., Head to left, on neck, "HELFRICHT F."; "BERNARD HERZOG ZU SACHSEN MEININGEN." Rev., Arms, with order, on mantle crowned; "EIN VEREINSTHALER XXX EIN PFUND FEIN 1862." On edge, "FIDELITER ET CONSTANTER."

SAXE-ALTENBURG.

45. ERNEST, 1853. Obv., Head to right, below F; "ERNST "HERZOG VON SACHSEN ALTENBURG." Rev., Arms on mantle, crowned; "EIN VEREINSTHALER XXX EIN PFUND "FEIN 1858." On edge, "GOTT SEGNE SACHSEN."

SAXE-COBURG-GOTHA.

46. ERNEST, 1844. Obv., Head to left, below B; "ERNST "HERZOG V. SACHSEN COBURG U. GOTHA." Rev., in three lines, in field, "DEN 29 JANUAR 1869; round, "EIN VEREINSTHALER XXX EIN PFUND FEIN." On edge, "FIDELITER ET CONSTANTER."

SCHWARZBURG-RUDOLSTADT.

47. FREDERICK GÜNTHER, 1807-1867. Obv., Head to right; "FRIEDR. GÜNTHER FÜRST ZU SCHWARZBURG." Rev., Arms, on imperial eagle; above, a prince's crown; "EIN "VEREINSTHALER XXX EIN PFUND FEIN 1858." On edge, "GOTT MIT UNS."

48. Similar to 47, but shield on Rev. slightly different in form, and a glory round each head of the eagle; date 1868.

49. ALBERT, 1867. Obv., Head to right; "ALBERT FÜRST ZU SCHWARZBURG." Rev., Arms, on imperial eagle, an aureole round each head, and above the imperial crown, all enclosed in an inner circle; "EIN VEREINSTHALER XXX "EIN PFUND FEIN 1867." On edge, as No. 47.

SCHWARZBURG-SONDERSHAUSEN.

50. GÜNTHER FREDERICK CHARLES II, 1835. Obv., Head to left, below A; "GÜNTHER FR. C. II. FÜRST Z. "SCHWARZB. SONDERSH." Rev., Arms, on imperial eagle, with aureole and imperial crown, over all a prince's crown; "EIN VEREINSTHALER XXX EIN PFUND FEIN "1859." On edge, as No. 47.

WALDECK.

51. GEORGE VICTOR, 1845. Obv., Head to left, below A; "GEORG. VICTOR FÜRST ZU WALDECK U. PYRMONT." Rev., Arms (nine quarters) on crowned mantle; "EIN "VEREINSTHALER XXX EIN PFUND FEIN 1859." On edge, "MUNZVERTRAG VOM 24 JANUAR 1857."

WÜRTEMBERG.

52. WILLIAM, 1816-1864. Obv., Head to left; "WILHELM "KÖNIG V. WÜRTTEMBERG." Rev., Arms crowned and helmeted, with supporters; below, on ribbon, "FURCHT- "LOS UND TREW" in German characters. "EIN VEREINS- "THALER XXX EIN PFUND FEIN 1864." On edge, as No. 51.

53. CHARLES, 1864. Obv., Head to right, on neck "C. "SCHNITZSPAHN"; "KARL KOENIG VON WUERTTEM- "BERG." Rev., as No. 52, but ornaments behind helmet, and legend on ribbon in Roman characters; date 1869. On edge, as No. 51,

FRANKFURT.

54. Obv., in a kind of ellipsis, a female bust to right, with wreath of oak on head, embroidered mantle, and at each side of neck a view of one of the towers of the city, on arm, "A. V. NORDHEIM"; "FREIE STADT FRANKFURT." Rev., in an inner circle the crowned eagle of Frankfurt, "EIN VEREINSTHALER + XXX EIN PFUND FEIN 1858." On edge, "STARK IM RECHT."

55. Obv., Similar to 54, but without ellipsis and towers, hair

at back of head arranged in two bows. Rev., Similar to 54, but without inner circle; date 1859. Edge, as No. 54.

56. Obv., Arranged partially round, partially across field of coin, "EIN GEDENKTHALER (five stars) ZU SCHILLER'S "HUNDERTJÄHRIGER GEBURTSFEIER (four stars) AM 10 "NOV. 1859." Rev., The crowned eagle, above "FREIE "STADT," below "FRANKFURT." On edge, as No. 54.

57. Similar to No. 55, but hair at back of head arranged in a small chignon; date 1862.

58. Obv., Genius standing on pedestal inscribed "A. V. NORD- "HEIM," leaning on shield charged with Imperial eagle, and holding a wreath in her extended right hand; "EIN "GEDENKTHALER ZUM DEUTSCHEN SCHUTZENFESTE," in field "JULI" 1862." Rev., as No. 56. Edge, as No. 54.

59. Obv., In an inner circle a view of the Rath-haus, &c., of Frankfurt; "FÜRSTENTAG ZU FRANKFURT AM MAIN IM "AUGUST 1863." Rev., In inner circle, the eagle; "FREIE STADT FRANKFURT EIN GEDENKTHALER." On edge, as No. 54.

BREMEN.

60. Obv., Arms crowned, with supporters; "FREIE HANSE- "STADT BREMEN," and in base, "EIN THALER GOLD." Rev., between two branches of oak, "ZUR 50 JÄHRIGEN "JUBELFEIER DER BEFREIUNG DEUTSCHLANDS 1863"; above, a Maltese cross. On edge, "GOTT MIT UNS."

61. Obv., View of the new Bourse of Bremen, above, "GOTT "SEGNE HANDEL U. SCHIFFAHRT"; in base, the Arms, on two sprigs of oak. Rev., between two oak branches, "GEDENKTHALER ZUR ERÖFFNUNGS FEIER DER NEUEN "BÖRSE IN BREMEN AM 5 NOVEMB. 1864. In base, B. Edge, plain.

62. Obv., Similar to 60. Rev., Between two branches of

oak, "ZWEITES DEUTSCHES BUNDES—SCHIESSEN IN "BREMEN 1865"; in base and across the stems of oak, two rifles in saltire; below B. Edge, as No. 60.

VIENNA.

68. Obv., The Imperial eagle crowned, charged on breast with a shield bearing the arms of VIENNA, all enclosed in a circle springing from the sides of the crown; in base, in a cartouche, "I FTHLR." round "III DEUTSCHES "BUNDES—SCHIESSEN WIEN 1868." Rev., Laurel-crowned female figure suspending a shield charged with the Imperial eagle to the branch of an oak, whose top has been cut off; in base, "SEIDAN"—round "WIR WOLLEN "SEIN EIN EINIG VOLK VON BRÜDERN." Edge, plain.

Addenda.

Since writing the above, I have obtained two new Thalers, and a partial description of nine more not contained in my list. They are—

ANHALT-DESSAU-COTHEN.

64. LEOPOLD FREDERICK, 1857. Obv., Similar to No. 1. Rev., Similar to No. 2. Date 1858.

LIPPE-DETMOLD.

65. PAUL FREDERICK EMIL LEOPOLD, 1851. Obv., Head to right; "PAUL FRIEDRICH EMIL LEOPOLD FÜRST Z. "LIPPE." A under Head, C.P. on fall of neck. Rev., Arms (nine quarters) mantled and crowned; "EIN "VEREINSTHALER XXX EIN PFUND FEIN 1866."

LIPPE-SCHAUMBURG.

66. GEORGE WILLIAM, 1787-1860. Obv., Head to right; Brehmer F on fall of neck, B under; "GEORG WILHELM "FÜRST ZU SCHAUMBURG LIPPE." Rev., Arms quartered with shield of pretense, with supporters, mantled and crowned; "EIN VEREINSTHALER XXX EIN PFUND FEIN "1860." Edge, same as No. 21.

MECKLENBURG-STRELITZ.

67. FREDERICK WILLIAM, 1860. Obv., Head to left, below A; "FRIEDRICH WILH. V. G. G. GROSSH. V. MECKLENB. "STRL." Rev., Arms (six quarters with shield of pretense) encircled by the Garter, "HONI SOIT QUI MAL Y "PENSE," and crowned; "EIN THALER XXX EIN PF. F. "1870." Edge, "GOTT SCHIRME MECKLENBURG."

PRUSSIA.

68. FREDERICK WILLIAM IV, 1840-1861. Obv. and edge, Similar to No. 27. Rev., Similar to No. 30. Date 1859;

69. And a thaler struck on the occasion of his death in 1861.

SAXONY.

70. JOHN, 1854. Ausbeute-thaler of 1866.

SAXE-MEININGEN.

71. GEORGE, 1866, issued a thaler in 1867.

SAXE-COBURG-GOTHA.

72. ERNEST, 1844. Obv., Similar to No. 46. Rev., Arms mantled and crowned, with Collar of Order; "EIN "VEREINSTHALER XXX EIN PFUND FEIN 1864."

SCHWARZBURG-RUDOLSTADT.

73. FREDERICK GUNTHER, 1807-1867. Obv. and edge, Similar to No. 47. Rev., Similar to that of his successor's thaler, No. 49. Date 1866.

74. He also issued a thaler in 1864, commemorating the fiftieth anniversary of his reign. (He was under a guardian until 1814.)

For the description of Nos. 65, 66, 67, and 72, I am indebted to Mr. F. J. Jeffery.

ARCHÆOLOGY IN THE MERSEY DISTRICT, 1869.

By Henry Ecroyd Smith.

(Read April 21st, 1870.)

The bill of fare, presented on this occasion to the historic student of our neighbourhood, is of an unusually diversified character, claiming the attraction of variety if not absolutely *recherche.*

Such objects and facts, however apparently trivial to the bustling men of the day, as are associated more or less with the progress and development of this great town, and thus calculated to prove of no little interest and reverence to our successors, have been chronicled as fully as the sources of information at the writer's command could supply. Contributions on such topics will at all times be "thankfully "received."

Perhaps the most valuable, as it is the most rare of our archæological discoveries of the year, is that of early ecclesiastical architecture and carved sepulchral slabs, dating from the Anglo-Saxon era, and disclosed during the restoration of the parish church of West Kirby in Cheshire.

The *minor objects* which have come to light, comprise,—*a Sestertius of the Emperor Trajan,* in fair condition, and found during recent excavations in Whitechapel, but which cannot be deemed to have remained here from ancient times; *a Shilling of Charles I,*—mint mark, an *anchor* (1628),—discovered among foundations at Everton, and now in the possession of Mr. C. H. Bosomworth.

A *Bristol Copper Token* of 17th century; *obverse,* "A BRISTOLL FARTHING, 1660"; in the field "C.B."; *reverse,* "THE ARMES OF BRISTOLL"; the arms of the city in the field. This piece was found by master John Green, near Rose Lane, Walton-on-the-Hill, in February,

and is now in the writer's possession. Its occurrence here forcibly carries the mind's eye two centuries back, when the traders of Bristol, then a port vying with London itself, called in Liverpool Bay among little ports on the north-western coast, never dreaming of the future prosperity and opulence of this "littel creke of y^e^ Port of Chester." In this instance we may easily imagine the skipper of a craft (lying at anchorage, say off Bootle), or one of his "merrie men," taking an evening lounge up the neighbouring hill for a better view of the estuary and the Cheshire or Welsh coast, and losing his little token, or perhaps "shying" it at some passing bird, as being of no manner of use to him so far from home. The city of Bristol produced tokens to a considerable extent in the middle of the 17th century. Among the types issued by its numerous tradesmen, the present one proves to be not uncommon on the banks of the Avon, though rarely met with so distantly as those of the Mersey.

A silver *Two-penny Piece* (Maunday series) of James II, found by master Thomas Green in April, during levelling operations at the new Anfield Cemetery. The smaller denominations of this monarch's mintage are all scarce.

A *Whetstone*, of fine slaty limestone, one end of which is deeply bevelled for perforation and suspension, the other being much worn and rounded, as if the article had been latterly used to rub with, in place of being rubbed upon. It was found by Mr. Charles Potter, upon one of the mounds of soil formed in the construction of Sefton Park, in January; its date probably the 17th century.

Operations at Wilderspool.

Dr. Kendrick, having engaged to record the recent discoveries on this Roman site in a memoir for our next session, upon the present occasion merely supplies the following epitome:—

"The excavations at Wilderspool, near Warrington, are

"proceeding very rapidly, and are watched with close atten-
"tion by several local antiquaries. Although very few entire
"specimens are found, yet the amazing quantity of Roman
"*pottery*, in a fragmentary state, shews that its manufacture
"was largely carried on at this spot, and many uncommon
"patterns and some unique forms of Roman vessels, have
"pleasantly rewarded the explorers. Fragments of *glass*
"vessels, implements of iron, bronze fibulæ, hair pins, and
"Roman coins are also frequently discovered. As yet no
"traces of human habitation, with the exception of a few roof
"tiles, and flooring of clay, have been met with, but there
"is every reason to anticipate that, ere long, remains of build-
"ings will be found, to complete the only link required to
"identify Wilderspool with the '*Condate*' of Antonine."

Section of Bewsey Valley at Warrington.

The railway under construction through the town of Warrington is carried upon a viaduct across the Bewsey valley, where extensive excavations were required, in order to reach a rock foundation, on which the supporting pillars were laid. The section thus presented was as follows, viz:—

	FT.	IN.
Lacustrine accumulations, consisting of silt from the boulder clay, fire clay, and small pieces of coal transported from the neighbourhood of St. Helens downwards	5	6
Black soil, with bands of sand and furze remains	2	6
Ancient forest, consisting of fir, alder, oak, and hazel, the two latter predominating	6	0
Gravel, consisting of rounded waterworn boulders and pebbles of syenite, quartz, graywauke and sandstone. This deposit is of glacial origin, and the representative of the *boulder clay* on the surrounding land, average depth	4	0
Shale of the *pebble beds*, which form the base of the Triassic group	6	0
Depth of section	24	0

In excavating through the ancient forest, the stumps of the trees were found in their original position, with their roots spreading in all directions, and when newly excavated the branches frequently presented the appearance of having been cut with a sharp instrument. A few fir cones were found and hazel nuts in great abundance. Near the upper surface of this deposit the skull of a bear was dug up, which appears to agree with *Ursus spelaeus* of Cuvier and Owen, found so abundantly in the ossiferous caves of Europe, and particularly in England, and will probably be found to belong to that species. Several bones were also dug up, but as they have not yet been identified it would be premature on my part to offer any opinion of the order to which they belong.

JAS. PATERSON.

Anglo-Saxon and Mediæval Remains at West Kirby.

The parish church of West Kirby, in the north-western angle of Wirral, dedicated to St. Bridget, is one of the earliest religious foundations in Cheshire. In conjunction with that of the conventual "cell" on Hilbre, it was apportioned by Robert de Rodelent, vassal of Hugh Earl of Chester under the Conqueror, to the Abbey of St. Ebrulf, at Utica, in Normandy. No record, however, is known to exist relative to the foundation of either, but both probably date from the 9th or 10th century. Of the original church, no remains were suspected to continue above ground by those who have written upon the subject;* but the recent restorations have brought to light a very curious *lintel*, which, being of a greenish-white limestone, contrasts strongly with every other block which is composed of red sandstone. The former, rectangular above but rounded below, would seem to have been formed of equal length, depth and thickness; but the lower part is broken away toward either end, much mutilating the sculpture. Three patterns are carried throughout the length without any

* *Transactions*, vol. iv, p. 198, and vol. vii, app. 12.

border moulding, viz., one a braid of five interlacing bands, and a second of imbricated work, each 7 inches deep, followed by a species of chain-work terminating in a narrow central mould or bead. The reverse side displays the same patterns, but more rudely executed, the former being elaborately tooled by a round-ended chisel, giving the effect of a frosted ground. The designs are of the greatest rarity among our very scanty relics of Saxon architecture.

In addition to this interesting block, which is 5½ feet long, many headstones of a very early character were (with the exception of one still remaining in the masonry north of the tower) found embedded within the walls of the mediæval restorations—or rather alterations—of the church, and thickly encrusted with plaster therefrom. Perfect and imperfect, these number nearly a dozen, yet no two display a similar design, notwithstanding that each bears a cross, generally incised. One of them, with the design in relief, has a rich interlaced pattern on three of its sides (the fourth being broken), whilst the angles are neatly corded. This is probably of the 9th or 10th century, but the others vary much in date, ranging from the 9th to the 12th century. Some examples, analogous in design to what appear to be of medium date, are reported to have been lately discovered at Adel, near Leeds, and were hastily assumed to be Phœnician, probably from certain peculiarities of ornamentation, unnoticed hitherto in England. The well-known "Hilbre Cross," in our President's possession, bears considerable resemblance to several of the Kirby headstones, but none of these approach it in point of original size, varying from 2 to 4 feet in height, and 10 inches to 2 feet in width. These likewise belong to a very rare class of sculptured remains, for we possess few headstones identified as of earlier date than the twelfth century.

The mediæval remains consist of the face of a male effigy, portions of window tracery and columns, and a number of

backs of chairs from the choir, carved in oak, the upper portions forming *fleurs de lis*.

All the above are preserved in the grounds of the rectory, adjoining the churchyard.

Primitive Canoe at Martin Mere.

A lengthy notice in the *Preston Guardian*, of 10th April, of the old swampy levels lying between Rufford and Southport, in connection with the discovery of a *canoe*, under what has for years been cultivated land, seems not to have attracted any attention in Liverpool. It would appear to have quietly lain in some snug "pigeon-hole" of the editorial desk, for several months at least, inasmuch as it commences by stating "there has just been discovered," and thus raising in the reader's mind anticipations no longer to be realized, as the present writer experienced on the day of publication. This highly-interesting relic having been left completely exposed to the sun, and the still more drying east winds of March, had thoroughly succumbed to the combined attack, and lay shrivelled up into a mere ghastly caricature of its former self. From personal enquiries of the finder, and a subsequent visit to the site, the writer is enabled to supply all the main reliable facts.

In the early part of January, a son of Mr. Robert Ashcroft, of Brickfield farm, Rufford, whilst ploughing a field in the occupation of his father, about a foot beneath the surface struck what he supposed to be a "stock" or trunk of an old tree—no infrequent occurrence hereabouts—and shortly procured assistance for its extrication. Upon clearing off the black peaty soil, the real character of the object became apparent; it was artificially hollowed out, in fact a boat, punt or canoe. It was found to lie on a considerable *incline*, thus inducing the conviction of its having been left hauled up, upon the then *beach*, remains of which, in a stratum of

gravelly sand, waved by tidal action, was struck four feet below the surface.

The canoe was found in an almost perfect condition, the sides alone being somewhat decayed, and would have proved a most interesting object for any neighbouring museum had it been properly conserved. From the exposure described, it seemed no longer worthy of removal to town, and has probably ere this been broken up for fuel. When discovered, it was very heavy, requiring the strength of several men in removal, being then temporarily secured by hoop iron. The outer dimensions were, 18 feet in length, 2 feet 10 inches in breadth, with a depth of 1 foot 8 inches, evidencing formation from an oak-trunk of noble girth. Four *seats*, the two central being a little wider than the terminal ones, retained their original position: these are secured to central supports by iron nails. The lateral joints proved rotten, and broke in the grooves when the seats were used. The nails proved to be the sole metal fitting of which any trace remained, and they not improbably had been used at a much later date than that of the original hollowing out of the canoe.

The bow, which is semi-circular, has a number of round perforations, all in line, and about 6 to 8 inches below the gunwale, being formed probably in connexion with some apparatus; but whether for sailing or piscatory facilities, or personal protection from enemies or the weather, it were now almost vain to guess.

Martin Mere was formerly a fine sheet of water and noted for its wild fowl. Leland, writing three and a-half centuries ago, says, "Martine Meare toward Lathom is the greatest "Meare of Lancashire, a iiii miles in Lengthe and a iii in "Bredthe."*

Dr. Legh tells us, a century and a-half later,† that it was

* Hearne's 2nd edition. Oxford, 1744. Vol. III, p. 46.

† *Nat. Hist. Lanc. and Ches. and the Peak in Derbyshire*, Bk. I, p. 17.

above eighteen miles in circumference and two in diameter before its first surface drainage by Thomas Fleetwood, Esq., of Bank Hall, in course of which no less than *eight* canoes were found, resembling those used by the North American aborigines. One is engraved by Dr. Legh,* along with a "celt" of bronze and a whetstone, found in a neighbouring morass, and supposed to have been used in construction of the canoes. The example depicted is much more pointed and solid at each end than the one discovered near Rufford; it bears no trace of seats or accommodation for above one pair of oars. One of the eight is said to have had some plates of iron upon it. Dr. Legh's work appeared in 1700, and other small craft of this character may have been discovered since, especially during the efficient drainage of the present century, which has rendered the site dry, and replete with a good and fruitful soil.

This is not the only instance of the discovery of a canoe during the past year in the north of England. The *Doncaster Gazette*, of September 10th, contains a notice of a log of oak found in the North Riding, 7 feet long and 3 feet in diameter, of which 5 feet in length, to a depth of 1 foot 4 inches, had been hollowed out, forming a primitive shallop or canoe. This specimen has been deposited in the Yorkshire Philosophical Society's Museum at Leeds, and the writer is inclined to think it of much earlier construction than that above recorded, the date of which may not extend beyond the mediæval period. The writer of the notice in the *Preston Chronicle* imagines it to be two or three thousand years old, but adduces no proof of great age. The great probability is its use at no very distant time by occupiers of the adjacent lands which surrounded the extensive mere. A farmer here would naturally desire to "paddle his own canoe" when visiting his fields across the water.

* *Nat. Hist. Lanc. and Ches. and the Peak in Derbyshire*, Plate IV, p. 181.

Purse of Old English Shillings at Formby.

Early in February, whilst removing the decayed thatch from one of the oldest tenements in the straggling village of Formby, the owner, whose family has resided in it for at least four generations, noticed, to his great surprise, some pieces of money dropping through the mass, and upon a careful examination the source of this supply was found in a *pig's bladder*, rotten with age and moisture, but which had apparently contained about a score of what proved to be English shillings of the 16th and 17th centuries, struck by sovereigns from Elizabeth to Charles II, both inclusive. All have been much pared at the rim and have seen considerable service in circulation, causing uncertainty as to mint mark in some cases, but the nineteen pieces which have come under notice may be tabulated as follow, the dates being appended :—

		Mint mark.	*Date.*
1	Elizabeth...	woolpack...	1594
2	James I. ...	fleur de lys.	1604
1	ditto ...	trefoil or cinquefoil	1613
4	Charles I...	crown.....	1635
1	ditto ...	triangle...	1639
1	ditto ...	star	1640
2	Charles I ...	triangle in circle.....	1641
1	ditto ...	P in circle	1643
1	ditto ...	R (?)	1644
1	ditto ...	R in circle	1644
1	ditto ...	K in circle	
2	ditto ...	illegible ...	
1	Charles II...	Crown(?)...	1660

Total :—Elizabeth, 1 ; Jas. I, 3 ; Chas. I, 14 ; Chas. II, 1=19.

Of these the only mintage which may be considered scarce is that of Charles I, in 1644, bearing R within an annulet as mint mark. The residue are all common types, and the batch may be taken as an average lot, to be hoarded by small savings in a rustic household. In this case, however, a further intention is evident, that of secretion, and the complete success of the act is demonstrated by the result. During the two centuries which have since elapsed, how many different families may have lived and died in close proximity to the little hoard, yet wholly unsuspecting its existence—destitute at times, or sick, yet unconscious of this source of relief!

The material of which the receptacle was composed, the

bladder of a pig, was formerly in frequent use in this district for the purpose, and the custom may have been widely practised, inasmuch as this substance was the best, as it was the cheapest, the farmer or cotter could obtain. Nothing could be procured so light and yet so tough as this, and consequently the asserted fact of its use even within the last fifty years is by no means surprising.

Produce of the Cheshire Shore.

A fair yield of antiquarian objects was secured during the year, the greater portion of which has been added by Mr. Potter to his collection. In default of a detailed description their prominent features only will now be noticed.

Roman.

Three small bronze coins, one of which, struck by the Constantine family, has for reverse the wolf and twins, with a tree and two stars above. A fibula with chequered enamel, in green, yellow, and white, and a pin in bronze. A small bead in emerald-coloured glass.

Saxon.

A silver penny of Edward the Confessor, representing the king enthroned, a rather scarce type, but the coin is in indifferent preservation. A dress or hair pin, buckle, and strap tag in bronze. Beads in glass and terra cotta.

Mediæval.

53 English silver coins, comprising—

1 Penny (half), William I, with two sceptres.
1 Do. do. do.
1 Do. (fragment) do. bonnet type.
12 Do. Henry II (one St. Edmundsbury).
9 Do. Henry III.
12 Do. Edward I or II.

3 Halfpennies, Edward I or II (one Dublin and one Waterford).

2 Farthings do. (London.)

1 Do. Edward III.

11 Quarters of Pennies and Halfpennies, Henry II to Edward II.

A *Counter* in copper, with large quatrefoil; *reverse* trefoil, with fleur-de-lis, &c.

LATTEN.—A *Ring Brooch* 1½-inch diameter, with cusps alternately solid, and set with coloured pastes, now decayed: it retains the pin.

A *Stud*, cruciform and chequered in the centre, the limbs elegantly terminating in fleur-de-lis.

A *Strap-tag*, with slashed ornament and acorn at extremity.

A *Needle*, 5 inches long, with round eye and round in the middle, but triangular below to the point, like the present sail needle.

A *Continental Imitation*.—Sterling of Galcher of Chatillon, Count of Porcieu. *Obverse* "✠ GALCHS. COMES. "PORC." around an Edwardian head within a dotted circle. *Reverse* "NIONET. NOVA. YVE," a cross batonné in the field. This type, of a class which it would be incorrect to describe as *counterfeits* of our contemporary English pennies, has not unfrequently occurred in this country, as in a trouvaille, chiefly consisting of Edwardian Sterlings, discovered at Wyke near Leeds, in February, 1836, and described by the Rev. D. H. Haigh in the *Archæologia*.* It dates from about 1318, and is engraved by Sneeling,† but is found to vary in respect of single letters in the inscription. Galcher was Constable of France. He coined money at Ivè and Neufchatel in right of his wife, the widow of Theobald II,

* Vol. xxviii, pp. 47–74. † Plate iii, No. 25.

Duke of Lorraine, whom he married in 1314. He was presented by Philip King of France with the County of Porcieu in Rathelois in 1308.

A *Seal* (see plate No. 3), well preserved was found during the autumnal equinoctial gales, the face of which is bluntly oviform, the stem hexagonal, and the handle trifoliate and perforated for suspension. The impression shews a seated figure of the Virgin Mary suckling the infant Jesus, who reposes on her left arm. At her right is a conventional two-leaved palm tree. The inscription "*Ave Maria Gracia*" (plena), and the device described are both of very frequent recurrence in mediæval times, save that the palm is but seldom introduced. The Angelical Salutation would appear, from its prevalence, to have been holden in especial regard, and was probably even held by the commonalty to possess talismanic virtues. It is to be seen upon many of the relics found on this site, including annular brooches, earrings, and a spindle whorl, all in lead or pewter. "*Ave Maria*" alone, occurs upon two small latten seals of similar execution to the present example, one of which is in the Mayer Collection. These bear over the figures of Mary and Elizabeth a fleur-de-lis of the very simplest form; here this emblem follows the salutation and precedes the divisional star. In all three instances the characters and figures are but rudely fashioned. In date they may be apportioned to the 14th century.

PEWTER.—*Brooch*, the upper portion whorled with fine tendrils, enclosing a beaded circle half an inch across, which by the hinder supports appears to have held an ornament of glass, enamel, or ivory; lower portion flamboyant, two inches long.

Brooch, formed of triangle within triangle, or the male and female principle united.

Brooch, digitated diagonally, with pin.

Brooch, a fragment, bearing "VE MA," part of "*Ave "Maria Gracia Plena.*"

Strap-tag, crescent-shaped, with foliate terminations.

Stud, an eagle standing with extended wings.

Stud, a small, upon a large quatrefoil, the latter pierced longitudinally.

Stud, a quatrefoil, each petal with cusp; a central square for setting.

Ornament, possibly an earring, with loop in imitation of a leaf, very finely reticulated.

Buckle, a new type, loop-shaped, with a long iron pin. Another of larger size is only represented by a fragment.

IRON.—Two *Arrow points*, one sharply barbed and well formed.

Key, with single spike in place of ward, 2 inches long.

Knife blades, some with hafts complete, 2 inches to 6 inches long; two of small size retain their orginal *wooden* handles.

A *Hunting knife* possesses its handle and guard, the latter with the pommel being circular, of iron and *wood*.

Goad of a spur, nearly 3 inches long.

Spade, shield-shaped, of wood, bound broadly with iron from the shoulder to the point. Across the shoulders, where the metal is somewhat flanged, it measures 10 inches: total length 19 inches. It is of the class denominated in Ireland "women's spades"; but though used till recently in the Sister Isle, it has long been obsolete in Cheshire.

GLASS.—Two *Beads*, ring-shaped, of straw colour. Another of a pale blue is fluted at the side, and measures half an inch in diameter.

Later English.

Two *Shillings* of Charles I, one with mint mark, a triangle, the other uncertain.

Early Printed Books.—With the issue of works from the early local press we appear to have but little acquaintance; and if this supposition be not wide of the mark, increased attention to the subject by bibliopolists and amateurs who possess the necessary leisure, might result in curious discoveries of more importance than the one eliciting the remark. A bookseller of Cockermouth, Mr. H. T. Wake, has informed the writer that a work recently passed through his hands, *The Psalms in Metre* (Tate and Brady's version), 12mo, and "*Printed at Liverpool in Dale Street*, 1718." Upon referring to Mr. Albert J. Mott's paper on this subject,* no mention is to be found of any work published here between the years 1712, when *Owen's Hymns* appeared, and 1736, the date of the first issue of Seacome's *House of Stanley*, and enquiries have failed to bridge over this considerable gap. Thus we "go from home to learn news," which by a little attention might probably be gleaned in tenfold quantity without straying; certainly we ought to be independent of such casual and distant sources of information. It is, however, possible that the above-named work, though printed, may not have been *published* in the town, which would account for non-insertion in Mr. Mott's memoir.

Foundation of the "Liverpool Library."—In the record of our year's transactions, by no means the least interesting is the presentation to the Society, by the executors of the late Mr. William Everard of this town, of an old-fashioned *cupboard and contents*, the former memorable as once serving to contain the nucleus of the important library now located at the Lyceum.

"An Historical Sketch of the Liverpool Library" appears in the ninth volume of our *Transactions*,† which is replete

* *Transactions*, vol. xiii, p. 103. † 1856–1857, p 225.

with very interesting matter and statistical information relative to the foundation and growth of this institution, furnished by the late P. Macintyre, Esq., M.D., who was long connected with its direction. His account of its origin is, however, in some particulars supplemented by Mr. Henry Roscoe, in his memoirs of his celebrated father, the historian and poet, from whom he would obtain perfectly reliable statements—Roscoe having from the first taken a prominent part in its formation.

Dr. Macintyre states, "a few gentlemen had for a year or "two, prior to 1757, been in the habit of meeting together for "the purposes of discussing literary subjects, and of reading "a portion of the periodical publications of the day. They "met from time to time at the house of Mr. William Everard, "an eminent mathematician and a schoolmaster, who lived in "St. Paul's Square. The small collection of books brought "out on these occasions was kept in a *corner cupboard* in "Mr. Everard's parlour. It was in the year 1757, however, "when the books becoming more numerous, and requiring to "be transferred from the cupboard to a large chest, that the "idea of circulating them among the members of the club, "came to be entertained and acted upon." The corner cupboard here mentioned is the identical receptacle lately presented to the Society. Mr. Roscoe informs us that the original proposition came from Mr. Edward Rogers in 1757;* it was immediately acquiesced in by his intimate friend William Roscoe, whilst Mr. Thomas Taylor and Dr. Rutter, quickly followed suit. Dr. Macintyre in continuation supplies facts which may be shortly stated. In the beginning of 1758, some of the principal merchants, professional men, and probably all the members of the St. Paul's Square club, formed a society for the establishment of a circulating library,

* This gentleman died in 1795. Roscoe composed some touching verses *In Memoriam*; but they are neither to be found in his "Life," nor in Young's compilation of his poetical effusions.

the result being the foundation of "The Liverpool Library" on the 1st of May, 1758, each member contributing one guinea and a permanent annual subscription of five shillings, or books. A catalogue was published the same year, with a list of the 109 proprietors (headed by "Mr. William Goodwin"),* and of the 450 volumes purchased or presented, Mr. Everard being constituted librarian, an office he held for twelve years. At first the books were domiciled in a house in Prince's Street, but in 1759 Mr. Everard removed them to one of his own in John Street, where he now resided, the library occupying the first floor. For this housing and his trouble he received ten pounds *per annum*, being succeeded by a gentleman named Broderick, who for two years officiated for £15; a Mr. George Barker following at the increased salary of £20. He retained the position for the long period of forty-six years. Such are a few of the simple records of the formation of a Library asserted by Dr. Macintyre to enjoy "the proud distinction of being the *first circulating library, not only in England, but in Europe.*"

Early Delft Cup.—Although the old cupboard, with its few and voluted shelves, could have held but a very limited assortment of books, it nevertheless came to us well freighted with small relics of Mr. Everard's generation. Among ladies' high-heeled satin shoes, buckles, old china, and other objects of English or foreign manufacture as used about a century ago by the fair denizens of Liverpool, we find two articles which command attention from their close connection with its productive industry at this period.

The earliest of these is an earthen drinking mug, nearly 5 inches high, and painted in a clear blue on a white ground, with a coast view, and shipping in full sail, inscribed above

* Mr. Ll. Jewitt states in his *Life of Wedgwood* that Mr. Thomas Bentley, his friend and partner, was a founder of the Library, but he does not appear to have done more than join the proprietary this year.

Rigg & Williams, Liverpool.

DRINKING CUP IN DELFT WARE.

The earliest identified example of the English Manufacture, and probably the produce of SHAW'S POTTERY, on the site of the FREE LIBRARY and MUSEUM, LIVERPOOL. Formerly in the possession of Mr. William Everard, and now in the Museum of the HISTORIC SOCIETY.

(4¾ by 4 inches actual size.)

"*John Williamson*, 1645." The ware is that technically termed *English Delft*, being analogous in its yellowish brown body and porcelain-like "slip" or thick glaze, to the products of the well-known manufactories at Delft in Holland, and originally produced by workmen from that locality, who were induced to settle in this country by Queen Elizabeth and her ministers. Although the fact admits of no dispute, not a single specimen of this early fabrication has yet been identified, and the oldest piece hitherto recognized as of English make is but of the age of Queen Anne! This is the very valuable, curiously quaint, and locally interesting rectangular plaque in the Mayer Collection, representing "A West Pro-"spect of Great Crosby, 1716," which is undoubtedly the produce of a Liverpool Pottery "Bank," not improbably that owned by the father or grandfather of Alderman Shaw, whose works were located near the site now occupied by the Free Library and Museum. Mr. Mayer, in his valuable contribution to our history of local industries,* informs us that the earliest mention he has been able to discover of Liverpool pottery is in the list of town dues payable at the port in the year 1674. As, however, no authenticated example earlier than the piece mentioned has been published by any recent writer upon English ceramic productions, it may be taken for granted that none have come into notice, and consequently it is an occurrence of great interest for, and congratulation to, the Society to find itself in possession of an example, not only of Liverpool but of *English* Delft ware, above seventy years older than any other known to be extant, in the little mug of "John Williamson." (See plate). This is a well-known Liverpool name, and the individual was probably a burgher who had ordered it for his private use, or received it as a present from some potter of the town. As will be noticed later on, an alderman, Edward Williamson, was Mayor in 1663.

* *Transactions*, vol. vii, p. 178.

Although, as has been stated, specimens of early English Delft are rare, several unappropriated ones are preserved in the Mayer and other collections. The writer had the pleasure of discovering an unpublished one of especial interest in the house of Mr. Isaac Pitt, of Cirencester, during a recent excursion in the west. It is a plate 9 inches in diameter, and bearing within a wreath, composed of two palm leaves, the inscription $\frac{S}{1688}$ O I, all painted in blue. The initials stand for those of *Oliver and Jane Sansom*, of Abington, Oxon. The former was an active preacher and missionary of the Society of Friends (opprobriously termed Quakers), and suffered much at the hands of the authorities in those persecuting times. A duodecimo volume, entitled *An Account of many Remarkable Passages of the Life of Oliver Sansom;* (London: printed by F. Sowle, in White Hart Court, in Gracious Street, 1710;) describes his life and death. Having been born at Bedon, in Berkshire, in 1636, the plate has probably been ordered by himself or some well-wisher, after he had passed his fiftieth year; and as at least the half of his long-married life was then spent, it cannot have been a wedding present. He resided during his latter years at Abington, where he died, and was buried in 1710. The plate was formerly in the possession of Daniel Rutter, Esq., of Witney, Oxon, who left it to his nephew, the present possessor. Its place of manufacture has not yet been identified, but Worcester or Bristol may probably substantiate a claim.

Printed Enamelling.—The other object is an oblong and rectangular box, apparently intended for a lady's toilet table. It is composed of brass, and measures 3¼in. *by* 2½in., and is 1⅝in. high. The metal is coated over within and without with a white enamel, this again being covered throughout by printing in black, the same being signed "J. Sadler Enam^{l}"

and consisting of a large amount of lettering and figures, comprising *The Ladies' Pocket Kalendar*, which occupies the cover and base; *Dominical Letter Tables*, the front; another *Dominical Letter Table, Golden Number, Epact, and Cycle of the Sun for* 1760 *to* 1777, the back; table for finding *Shrove Tuesday, Easter, Holy Thursday, Whit Sunday, Trinity Sunday, and Advent during the same long period*, the ends.

Enamelling on brass or copper was practised during the latter half of the last century at Battersea, at Bilston in Staffordshire, and perhaps other localities in Great Britain; but Liverpool does not appear to have been accredited with this peculiar manufacture by any author or "*bric-a-brac*."

The signature—and it is not the only instance—is unequivocal, "J. Sadler, Enam$^{l.}$"; it can mean nothing else than that Sadler, by his own hands or those of an assistant, covered the metal with enamel before printing with the elaborate tables enumerated. Had the signature stood alone, it might be assumed that the word *sculpsit* had been intended, but the Mayer collection possesses, among many other valuable examples of Sadler and Green's printed enamels, a portrait of Frederick III, King of Prussia, signed "J. Sadler, Liver$^{l.}$ Enam$^{l.}$" The inaccuracy of the contraction Enam$^{l.}$ in place of Enamell. or Enamel$^{r.}$ is in favour of the authenticity of the signature, seeing that, clever as he was, Sadler had not received a classical education, and consequently was liable to errors of this kind. Mr. Mayer has adduced important evidence to prove that to him the credit of inventing the art of printing ceramic wares by the medium of copper-plates is clearly due, and though the same is claimed for potters at Battersea, Worcester, and Lowestoft, it cannot be denied that the industrious Liverpool engraver has at least a coeval claim to the discovery and application of this most useful art, which in the course of the year 1756 became

almost simultaneously known to the country through the productions of Liverpool, Worcester, and Battersea.

Enamelled Patch-Box, &c. Another article in enamelled copper, and probably of Liverpool make, was discovered in May last by a youth named Geoghegan of this neighbourhood, who, taking a fancy to ransack an old family clothes-chest, found in this ancestral depository a "secret drawer," containing several MS. letters and a lady's patch-box, within which, in place of black patches for the face, lay a pair of silver knee-buckles. The first have by accident not reached the writer, but are said to have been penned by a lady to her butler, who would seem to have kept these and the box as souvenirs of his departed mistress. The patch-box, of copper but mounted with brass, is of the ordinary small size of the latter part of the century, when patches of but limited dimensions were in vogue; it is oval in form and enamelled throughout. Upon the upper surface the lid is printed in lilac, on a white ground, with a jovial-looking male head, having on the right side a loaf, and on the left a foaming tankard; below are a couple of tobacco-pipes "*en saltier*," and from the mouth a small scroll issues, labelled "Peace and "Plenty." Above this brusque design is inscribed—

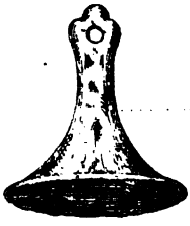
"With Bread so large, & Ale so fine,
"You soon will have such cheeks as mine."

Both subject and motto are thoroughly characteristic of the period. The remainder of the outer surface is yellow, within being white except the lid, which is of a pale mottled green. It may be remarked that the lilac colour used in the printing was evidently a favourite one with Messrs. Sadler and Green, and being rarely used elsewhere, these facts confirm the present appropriation.

XVII *Century Token of Peter Atherton.*—Mr. Mayer has recently added to his large collection of Tokens of this period an unpublished Liverpool type, "PETER ATHERTON";

1

2



3

IMPRESSION.

4

1. *Unique and unpublished Counterfeit Sterling of XIV Century, inscribed to Julius Cæsar.*

2. *Halfpenny Token of "Samuell Raithborne" issued in Liverpool, 1669.*

3 *Seal of Latten, found on the Sea beach of Cheshire.*

4. *Halfpenny Token of Peter Atherton, Liverpool, 1668.*

Riby & Williams, Liverpool

in the field a long plain shield. Reverse "OF LIVERPOOLE, "1668"; in the field "HIS HALF PENY." See plate No. 4.

XVII *Century Token—Rathbone Family.*—At an early meeting of the Session a local token of some interest, possibly unique, and certainly unpublished, was exhibited by Mr. Mayer, through the kindness of Mr. William Rathbone, M.P. The family of Rathbone was well known to be one of the oldest belonging to and still connected with the town, but it is believed few reminders of this association exist beyond the last century. There can be little doubt of the token having been issued by one of its leading members in 1669, one of the latest years in which such pieces—whether pennies, half-pence, or farthings—were allowed by the government of Charles II, after the license had continued for about eleven years. As only well-to-do tradesmen usually availed themselves of this privilege, it is no presumption to consider "Samuell "Rathborne"—such being a variation of the orthography two centuries ago—as a burgess of repute in the good old town. Referring to the illustration, No. 2, the piece will be found inscribed on the obverse "SAMVELL RATHBORNE," with a rose for division, a *lion rampant* occupying the field, this device being probably the sign of his business establishment, possibly the family crest. On the reverse the inscription is continued "IN LIVERPOOLE 1669," followed by another six-petalled rose, whilst in the field appears "HIS HALF "PENY," with three pellets beneath. Whether this burgess in addition issued penny or farthing tokens, we have no means of ascertaining, the present being the only piece of his as yet heard of. It was unknown to Mr. Boyne, or would have been described in his work,* where only the following Liverpool types are described :—

Charles Christian ..... Penny..... 1669

* *Tokens of the 17th Century.* London, 1858.

Addam Crumpton		1657
Richard Crumpton.....	Halfpenny	1667
Roger Gorsuch		1672
Thomas Johnson	Halfpenny	1666
John Pemberton.....	do.	1666
Edward Williamson ...	do.	Alderman.

The last-named issuer was chosen Mayor in 1663. Both Williamson Street and Williamson Square were named after him. An example of Christian's and another of Richard Crumpton's issue the writer has already described as found in recent years upon the sea beach of Cheshire; none of the series are of common occurrence, and this second addition to the published list of Liverpool's 17th century tokens may thus not improbably be supplemented by the discovery of others.

Among the Bold Charters in the Museum at Warrington, the name of Robert Rathbone occurs as a witness in 1536 to a grant of land in Great Sankey, from James Ford to John Parker. He was probably an ancestor of Samuel.

The next notice to be mentioned regarding this family occurs a couple of generations later. It is furnished in form of an official document of the Society of Friends, to which the father of the subject of it was joined in membership in middle life.* This religious body has been accustomed almost from its very earliest days to record through its local "monthly meetings," and after decease, testimonies of those who have exercised within its sphere ministerial functions. The document in this instance being of a more than ordinarily interesting and comprehensive character, is subjoined entire. It proves that for at least a century and a half ancestral virtues have been notably transmitted and sustained by one of the first families of our "Merchant Princes."

"A Testimony concerning William Rathbone of Liverpool, "deceased; from Friends of the Monthly Meeting of Hard-

* In 1677, a widow named Elizabeth Rathbone of Widnes, was buried in the graveyard attached to the Friends' meeting house at Penketh.

" shaw* in Lancashire, holden at Warrington the 15th of the " 12th Mo., 1789.

" Mark the perfect man and behold the upright, for the end of that " man is peace."—Psalm xxxvii, v. 37.

" Our dear friend, William Rathbone, was born in Liver- " pool, in 1726, of parents who were members of the National " Church; but his mother dying before he was two years old, " and his father being very soon after convinced of our religious " principles, their son was carefully educated therein, and " being in a good degree obedient to the visitations of divine " grace, he became, even whilst young, an example of sobriety " and industry.

" About the seventeenth year of his age, being under " discouraging circumstances, he formed the intention of going " abroad, with a view to acquire wealth, but when he thought " himself on the point of carrying this design into execution, " his mind was brought under a weighty exercise, and he was " impressed with a persuasion that his appointed station was " in his native place, where a field of religious labour was " opened before him; and that if he persevered in his inten- " tion his religious interests would be subverted, and the " divine will concerning him be opposed. In this state of " conflict he was convinced that if his whole dependence " were fixed on the Almighty arm, it would supply all his " wants, and be an unfailing support in the various trials " that might be allotted to him. Through the continued " extension of divine regard, he was enabled to yield obedience " to these convictions, to enter into a covenant with a covenant- " keeping God, to limit his desires after perishing riches, and " to bear the turnings of the holy hand upon him.

" And as he was favoured to enter upon the active scenes " of life, with faith and dedication of heart, so he was sup- " ported in his passage through it, to bear his portion of

* Formerly *Hartshaw*.

" disappointment and affliction with Christian fortitude. The " gracious Being who had directed his feet into the right way " was mercifully pleased to be with him from step to step, so " that he increased in stability and religious experience, and " became eminently qualified for usefulness.

" In the thirty-third year of his age he was appointed an " Elder, and we esteemed him worthy of double honour, he " being vigilant, sober, of good behaviour, given to hospitality, " apt to teach, patient, not covetous, one that ruled well his " own house.

" He was of sound judgment, his intellectual faculties " were clear and strong; and having by long obedience to the " manifestations of duty, known the work of sanctification, " he became clothed with the humility of a Christian, skilful " in the mysteries of the Kingdom, and zealously concerned " to turn many to righteousness.

" He was very diligent in attending our meetings for worship " and discipline, and his movements in the church were truly " exemplary and edifying, being marked with firmness, im- " partiality, and rectitude.

" In visiting families his service was great, he being emi- " nently endowed with divine wisdom and power to speak to " the various states of the visited, to the edification and com- " fort of many; and he was frequently under appointment to " visit Monthly and Quarterly Meetings in different parts of " this nation, and once those in Ireland. In conversation " he was solid and deeply instructive; his deportment was " weighty and serious, but accompanied with great meekness " and condescension.

" In the discharge of his various relative and social duties " he was an amiable example, and in transacting his temporal " concerns his uprightness and punctuality gained him great " confidence and esteem.

" In the forty-ninth year of his age he came forth in public

" testimony, and afterwards performed several journeys with " our certificates.

" In the exercise of his gift he was concerned to wait in " deep attention to the single leadings of the Holy Head of " the Church, that his offerings might be kept pure, whereby " he was enabled to preach the Word in much plainness and " simplicity, with the demonstration of the spirit and power; " neither seeking popularity nor regarding the censorious, but " being careful to fill up the measure of his duty and to serve " his generation with faithfulness; thus, building on that " foundation which standeth sure, he became a steady pillar " in the church to the conclusion of his time.

" For some months before his decease his mind was remark- " ably gathered from and raised above all temporal things, " and his public testimonies were attended with increased " liveliness: he appearing like one with his loins girded about " and his light burning, waiting for the coming of his Lord, " and we have good cause to believe the solemn summons " found him prepared.

" He was enabled to sustain his last illness, which was " short yet severe, with patience and serenity, and the night " before his departure, he was much engaged in supplication, " and favoured with near access to the Throne of Grace; and " though the nature of his disease rendered it difficult for him " to speak distinctly, yet it was a season of awful solemnity, " in which he was supported under great pain and weakness " to sing a triumphant song of praises to the Lord.

" He departed this life the 11th of the 8th month, 1789, " and was interred in Friends' burying ground* the 14th of " the same, in the sixty-fourth year of his age; a Minister " about fourteen years.

" Signed in, by order, and on behalf of, our aforesaid " monthly meeting, by " JOHN BLUDWICK, Clerk."

* Situate in Hackin's Hey.

The son of the worthy citizen whose merits are thus simply but emphatically recorded—another of the long succession of William Rathbones—married Hannah Mary, only daughter (by his first wife, Hannah Darby of Coalbrookdale) of Richard Reynolds, the philanthropist of Bristol. They were the parents of the justly revered gentleman—said to be the fifth William in succession—who, full of years, was lately removed from among us, and were consequently the grand-parents of our present Liberal representative in the national senate.

Coin Trouvailles in Wales, and the Treasury Claims.

A keen relish for any casual disentombment of medallic treasures is natural to the numismatist, but the archæologist and the topographer have likewise a vital interest in such realizations. A monster influence is, however, at work, snatching the very bread from their mouths and robbing History herself. This vampire is "the law of treasure-trove," which is at once essentially absurd in inception, unjust in operation, and impolitic throughout; in short it demands a thorough reconstruction, in conformity with the advanced spirit of the age.

That great Emperor, the chief mundane benefactor whom Britain ever knew, the illustrious Hadrian, abolished the previous Roman laws on this subject; and though, no doubt, it may be advantageously modified to suit the present social condition of European nations, his edict exhibits a far more enlightened appreciation of the principles of *meum* and *tuum* than any of our later national laws. By this decree, treasure found in a man's own, or in any sacred ground, belonged to himself; if in another's—even that of the Emperor—half went to the finder and half to the owner of the soil. Eighteen centuries have rolled away, and the proud Briton of our

boasted day of civilization finds himself subject to the following mediæval regulations :—

Coin or other valuables, found hidden in the earth, the owner being unknown, belong to the Crown; if the owner be known or ascertainable such remain his. The Crown's title is clear, if such appear to have been deposited with the *intention of reclaiming it*. Where intentionally abandoned, as assumed when found in the sea, ponds or rivers, or upon the surface of the earth, it is the property of the finder.

This being, it is believed, a correct epitome or digest of the present law, who can wonder, when, under these conditions, nine-tenths of the hoards of coins which come to light, *revert legally* to the Crown, that every effort should constantly be made to evade its claim, by obliterating all traces of the exact *site* of discovery and maintaining silence on the *fact*?

These remarks have been elicited through a recent circumstance. The writer some few months ago received, from an intelligent person of the lower class, a communication in which allusion was made to no less than four instances of discoveries of coin in Wales, in every one of which, fearing these claims, the finders, at the earliest possible opportunity, had taken or consigned the pieces for sale at bullion offices or shops of pawnbrokers in this town—of course simply for their metallic value—rather than risk suspicion of their discoveries, by attempting to obtain a more discriminating value at the hands of a connoisseur. By such practices how many valuable numismatic relics have been lost to science!

In the course of the past summer a hoard of about 200 coins—*presumably* English of 13th or 14th century—were found in Carnarvonshire, *three* only of which have as yet come to light, being sent as a sample, though probably taken at random, the finder being desirous of learning the value, numismatically it may be assumed, before disposing of the lot in the usual summary manner. The three pieces were

submitted to the writer, who could only report that if they were virtually a "sample," they represented a most interesting trouvaille. Two proved but common pennies of well-known Edwardian mintages, the third, however, so far as information is attainable, is an unique piece, and may be thus described :— (See plate No. I.)

Obverse.—"NOM . IVLIVS . CESAR"; in the field a crowned head with long flowing hair, in the mode of our earlier Edwards, below which is a fleur-de-lis. *Reverse.*— "DA . C'RVM . CESARI," or "SACRVM . CESARI," some uncertainty existing in regard to the primal letter, which is more imperfect than its fellows. Whichever way numismatists may decide the point, as "*rendering unto Cæsar the "things that are Cæsar's*," or simply "*sacred to Cæsar*," we here possess a very singular example, unique and unpublished, of a 14th century "counterfeit sterling." In the field appears the ordinary cross and pellets of the common English currency. A large proportion of these imitations bear the name of Edward, but here the penalty for forgery has been ingeniously averted, and it doubtlessly being assumed that few would trouble themselves to peruse the circumscription, if assured of the genuineness of the metal, the piece has passed muster among the current pennies of the realm. Whether it may be classed among the productions of Luxembourg, which, passing into this country, were usually designated "*Lushborrows*," is uncertain,—such pieces, with others issued by several of the smaller continental states, were much circulated in England during this century.

PROCEEDINGS,

TWENTY-SECOND SESSION, 1869-70.

ANNUAL GENERAL MEETING,

Royal Institution, Colquitt Street, Liverpool, October 18th, 1869.

JOSEPH MAYER, F.S.A., PRESIDENT, IN THE CHAIR.

The Minutes of the Annual Excursion having been read and signed, the SECRETARY read the following

REPORT.

The Council beg to report that the Society, during the past Session, has steadily continued to carry out the objects for which it was instituted, and during that period Papers of great interest have been read, most of which will appear in the forthcoming volume of Transactions.

The characteristic feature of this Society is known to most but not all of its members: it is, that by one of its fundamental Laws, a Volume, of greater or less extent, must be placed in the hands of each member annually, giving an account of the Society's labours and condition. The consciousness, therefore, that the best papers will be placed in their hands in a printed form, makes the personal attendance of the members less necessary; but the Council incline to think that it is still desirable that much additional light should be thrown upon objects exhibited, and more lively interest be given to the discussions by a larger attendance at the meetings of the Society.

The Council have revised the list of Members, and struck out the names of those who have allowed their Subscriptions to fall into arrear; if, therefore, the list of Members happens to be smaller than usual, it must be remembered that it shews the real strength of the Society, without the encumbrance of the names of those who have ceased to feel an interest in its operations.

The Treasurer's Balance Sheet for Session XX will be laid before the Society this evening, and it is satisfactory to know that a fair balance remains in hand after defraying all charges.

Mr. Joseph Mayer, who has so ably filled the office of President for the past three years, has intimated his desire to retire, and has expressed a hope that the Rev. Dr. Hume might be elected in his place. The Council would willingly retain Mr. Mayer in his present office if he would permit it; and feel sure that they are only expressing the general feeling in acknowledging the Society's indebtedness to him during his term of office, and for the zeal and interest he has always manifested in its welfare.

In concurring with Mr. Mayer's suggestion as to the election of his successor, the Council would observe that the Rev. Dr. Hume was also one of the founders of the Society, that for sixteen years he was its Honorary Secretary, and scarcely a Session has passed without his contributing one or more papers, most of which have been published in the Transactions.

The Council regard with much satisfaction the approaching visit of the British Association to Liverpool, and take this opportunity of thanking Dr. Hume for his advocacy of the claims of this town at the Exeter meeting, which contributed in no small degree to this locality being chosen.

It will be the duty of the New Council to make arrangements for a fitting recognition of the distinguished Society which will shortly honour us by its presence; and remembering the action taken by their predecessors in former years, the retiring Council look forward with a firm conviction that the Historic Society of Lancashire and Cheshire will not fail in shewing that warmth of hospitality which will convince our visitors of the earnest sympathy which we, as a Society having kindred objects, have with their important and distinguished body.

The Report was unanimously adopted.

The passing of the Treasurer's Accounts was postponed till the next Meeting, the Auditors not having had time to complete their examination.

A cordial vote of thanks was passed to Mr. Mayer for his services as President during the year.

The election of Officers and new Members of the Council was then proceeded with, and the result, as shown on page iv, announced from the chair.

November 4th, 1869.

Rev. Dr. HUME, President, in the Chair.

The following objects were exhibited:—

A fossilated footmark of the infant Labyrynthedon, found some time since in Mr. Brocklebank's great quarry, Upper Bebington.

By the President, in illustration of his paper.

The report of the International Congress of Prehistoric Archæology, and a work on Flints, by A. P. Madsen of Copenhagen.

The President delivered his INAUGURAL ADDRESS.*

On the motion of Mr. Mayer, seconded by Mr. Benas, it was resolved that the Address be printed and circulated amongst the Members.

* Transactions, page 1.

November 18*th*, 1869.

Rev. Dr. Hume, President, in the Chair.

Mr. George Thomas, of Lord Street, Liverpool, was duly elected an Ordinary Member of the Society.

The following objects were exhibited:—

By Mr. Moore, of the Free Public Museum.

1. A Brazilian hammock of Indian work from the Amazon, the material being grass, beautifully ornamented with devices formed by the various coloured feathers of native birds. It had been presented to the Museum by Mr. Brocklehurst.
2. A large Indian axe, mounted with a surrounding band-like osier. It had been presented to the Museum by Mr. F. Green, and found in Lee county, Iowa.
3. A smaller axe, of nearly the same shape.
4. A spear-head of dark stone, chipped but not polished, found along with the above.

By Mr. Jos. Mayer, for J. A. Tinne, Esq., F.R.G.S.

A Roundell, containing various relics:—(*a*) A portion of the true cross and sword; (*b*) Fragments of the bones of saints; (*c*) Two silver fibulæ or brooches; and (*d*) A portrait of St. Alexandrina set in silver.

By Mr. H. Ecroyd Smith.

A curious copperplate engraving of the last century, replete with allegorical figure-groups and other objects, illustrative of the 5th chapter of St. Luke's Gospel.

By the Rev. Dr. Hume.

1. An egg of an Emu from Australia.
2. Two skeleton leaves of the Eucalyptus, or gum tree of Australia.

By Mr. E. A. Heffer.

Photographs, comprising the following:—

The Butter Cross at Winchester.
Interior of Boddalwyddon Church, North Wales.
The Choir, Canterbury Cathedral.
Gloucester Cathedral.
Chedder Cliffs.

A copy of a Tomb-stone at Winchester, bearing the following inscription:—

"In memory of Thomas Thetcher, a Grenadier in the North "Regiment of Hants Militia, who died of a violent fever, con- "tracted by drinking small beer when hot, 12th May, 1764, aged "26 years, in grateful remembrance of whose universal goodwill "towards his comrades this stone is placed here at their expense, "as a small testimony of their regard and concern.

"Here sleeps in peace a Hampshire Grenadier,
"Who caught his death by drinking cold small beer;

"Soldiers be wise from his untimely fall,
"And when you're hot drink strong or none at all."

This memorial being decayed was restored by the officers of the garrison, A.D. 1781.

By Mr. Samuel Smith, jun.
A small book entitled *De Imitatione Christi*, remarkable for its diminutive size and the clearness and elegance of its typography; it was printed in Paris in 1858.

By Mr. Isaac Roberts.
A model of Jerusalem and the surrounding country, as arranged by Sir Henry James—the geological materials being shewn in colour and the elevations by contour lines, distant twenty-five feet from each other, and the total elevations of the principal places being shown.

By the Rev. Charles Jones.
Three volumes of Jacob Beteman's works, as edited by Law. He drew attention to the plates, one of which exhibited a large number of superimposed objects.

By David Buxton, Esq.
A series of photographic views, illustrative of his paper.

The Rev. Dr. Hume placed on the table a series of books, kept, more than a century ago, by a farmer near Bidston. He read a few extracts, shewing the character of the information on local subjects, and promised to give a fuller account of them at some future meeting.

The following Paper was read:—

NOTES OF A CONTINENTAL TRIP IN MAY—JUNE, 1869, *by David Buxton, F.R.S.L., Hon. Secretary.*

December 2nd, 1869.

Rev. Dr. HUME, President, in the Chair.

The following objects were exhibited:—

By Mr. B. L. Benas.
1. An oval medal, commemorative of the marriage of Charles I with his queen Henrietta Maria.
2. A medal, commemorative of the victories of Gustavus Adolphus during the thirty years war.
3. A medal, representing the death of Gustavus Adolphus at the battle of Lutzen, 1594.

By Mr. H. Ecroyd Smith.
A sestercius, or large brass coin of Trajan, in good preservation, found by Mr. Wm. Dunnick among soil thrown out during recent excavations in Whitechapel, Liverpool. The reverse represented a female figure and attendant, inscribed "Alim

"Ital," and supposed to refer to succour forwarded to Italia during a dearth. This city, near Seville in Spain, was the natal city of Trajan, and also of Adrian and Theodosius the Great.

By the Rev. Dr. Hume.

An impression of a seal, in the possession of Mr. Potter, and found at Hoylake, probably of the 14th century. It contains figures of the Virgin and Child in front of a palm tree, with the legend "Ave Maria Gracia," in angular letters.

By Mr. John G. Jacob.

Two interesting specimens of photographic portraiture, by Millichap, also several curious ancient volumes.

By Mr. T. J. Moore, of the Free Public Museum.

A vertebra and ribs of large size of the fin whale, called "Steyperydr" by the Icelanders (*Balænoptera Sibbaldii* of Dr. Gray.) These bones were presented some time since by Mr. Henry Bird, and are interesting at this moment from the fact that the huge whale lately stranded at Lang Niddry, in Scotland, has been referred by Professor Flower, of the College of Surgeons, to this species; it has only been made known during the last few years, and its remains are exceedingly rare in collections. Mr. Moore also exhibited various specimens in support of the statement, that the so-called "human eyes" found in the mummies at Arica are, as asserted by naturalists, the eyes of some species of squid or cuttle fish. These objects consisted of the beaks and arms of little cuttle fishes, and hemispherical amber-like objects taken from the maws of albatrosses by Captain Cawne Warner; also specimens, in spirits, of squids taken off the British coast, in the centre of the eyes of which amber-like objects were also shewn, all most closely resembling the objects found in the skulls of the Peruvian mummies, and asserted by some to be human eyes, by others to be vegetable secretions, but now generally acknowledged to have belonged to the cuttle fish.

The President called attention to the death recently of one of the senior members of the Society, Mr. John Hodgson Hind, F.S.A., formerly M.P. for Newcastle-on-Tyne. He had been a Member of the Society for eighteen years, and had contributed one or more Papers to the Transactions.

The President also remarked upon the explorations lately made in Yorkshire, on the estate of Sir Henry Boynton, Bart., at Rudstone, near Bridlington, which had yielded results of a most surprising nature. Two very large round tumuli had been examined, resulting in the finding of a large number of bodies, implements, weapons, ornaments, pottery, &c.

The President also drew attention to the surprising results of the deep-sea dredging by Mr. Sors, while surveying the coast of Norway, which shewed that animal life was present at 1500 and even 2435 fathoms depth.

December 16th, 1869.

Rev. Dr. HUME, President, in the Chair.

Benjamin Llewellyn Vaudrey, Esq., Tushingham Hall, Whitchurch, was duly elected an Ordinary Member of the Society.

The following objects were exhibited:—

By Mr. Walthew.

A copy of the "Breeches" Bible, with which the New Testament was not bound up, and remarkable for the curious wood engravings with which it was illustrated.

By the Rev. Dr. Hume.

1. Two Peruvian "Huaccas," or vessels found in mounds of the same name, along with the remains of the dead at Peru.
2. A wood engraving of the extraordinary strap in the possession of Mr. Potter, which was found on the beach near Hoylake, and is filled with silver studs. It is supposed to have been worn on the person of a monk or other ecclesiastic, and from it were probably suspended keys, while itself hung from the waistbelt.

By Mr. Benas.

A variety of examples of American paper money, which might almost be said to form a bank-note history of the United States. They comprised the following:—(1.) A bank-note, value sixpence, of the "American Colonies," before their separation from Great Britain; printed by Benjamin Franklin with his own hand in 1764. (2.) A bank-note of the same period, printed by Hall and Sellars in 1773, after Franklin had retired from the firm; value 10s. (3.) A bank-note issued by the United Colonies during their conflict with the mother country in 1776, for six Spanish dollars, and inscribed—"to "counterfeit is death." (4.) A note of one penny, issued during the financial difficulties, when neither dollars nor small change could be easily obtained, dated Feb., 1790. (5.) A series of fractional currency, consisting of half, quarter, tenth, and twentieth parts of dollars; also notes for fifteen cents and three cents, embracing every issue of the various dies used by the United States from 1861 to 1869 inclusive, and consisting of twenty-six distinct impressions, each differing from the other; they bear medallion portraits of various American statesmen, and form a collection of the most perfect bank-note engraving. They are exceedingly artistic in their execution, and they explain the fact that several independent states on the American continent and one or two in Europe have their postage stamps or paper money, or both, printed in the United States.

The following Paper was read:—

EYES'S LITTORAL SURVEY OF THE PRINCIPAL PART OF THE PORT OF LIVERPOOL, UNDERTAKEN FOR THE DUCHY OF LANCASTER IN 1828, AND FOR THE MERSEY CONSERVANCY IN 1839, WITH EMENDATIONS AND ADDITIONS FROM THE ORIGINAL NOTE-BOOKS,* *by Joseph Boult, F.R.I.B.A.*

* Transactions, page 171.

December 30th, 1869.

Rev. Dr. HUME, President, in the Chair.

The following objects were exhibited:—

By the Rev. Dr. Hume.

1. Two small tobacco pipes, found last year in the foundations of a factory at Lichfield. They were of very peculiar structure, and are supposed to have been manufactured soon after the introduction of tobacco into this country.
2. A small basket, most ingeniously constructed from the seeds of the melon.
3. A sermon note-book, containing sixty-one sketches of sermons made during the period from 1749 to 1769, mostly taken from texts in the more obscure and prophetic books, by one of his ancestors.

The following Paper was read:—

THE POLITICAL ECONOMY OF GREAT BRITAIN. PART II. THE POOR LAWS,* *by B. L. Benas, Esq.*

January 20th, 1870.

JOSEPH MAYER, F.S.A., in the Chair.

The Rev. Mackenzie E. C. Walcott, B.D., F.S.A., Precentor and Prebendary of Chichester, was duly elected an Honorary Member of the Society.

The following objects were exhibited:—

By Mr. F. J. Jeffery.

The medals issued by the government for the Abyssinian and New Zealand wars, and in the course of allusions to their execution, it was remarked, as a curious omission, that neither of them bore any date.

By Mr. Dyall, Assistant Secretary.

A raised plan of the Isthmus of Suez, shewing the course of the Canal, and the surrounding country.

The following Paper was read:—

THE SUEZ CANAL AND THE PACIFIC RAILWAY, *by J. T. Towson, Esq., F.R.G.S.*

* Transactions, page 77.

January 27th, 1870.

Rev. Dr. HUME, President, in the Chair.

The following objects were exhibited.—

By the Rev. Dr. Hume, from Mr. Potter's collection.

1. A curious spool or bobbin, formed of three separate pieces of wood, turned in a tubular form.
2. Three portions of an ancient silver brooch found at Hoylake.

The following Paper was read:—

INVENTORIES OF CHURCH GOODS AND CHANTRIES, TEMP. ED. VI, *by the Rev. Mackenzie E. C. Walcott, B.D., F.S.A., Precentor and Prebendary of Chichester.*

February 10th, 1870.

HENRY DAWSON, Esq., in the Chair.

Mr. John Hyde, of Southport, was duly elected an Ordinary Member of the Society.

A copy of the celebrated Milton shield, presented to the Free Public Museum by Messrs. Elkington & Co., was exhibited.

The following Paper was read:—

INVENTORIES OF CHURCH GOODS AND CHANTRIES IN LANCASHIRE, TEMP. ED. VI (1553,) *by the Rev. Mackenzie E. C. Walcott, B.D., F.S.A.*

February 24th, 1870.

JOSEPH MAYER, F.S.A., Vice-President, in the Chair.

The following objects were exhibited:—

By the Rev. Dr. Hume.

Specimens of illustrated newspapers published in New Zealand.

By Mr. Dyall.

Specimens of newspapers published in South America.

By Mr. Mayer.

1. Impressions of seals of Furness Abbey, Cartmel Priory, and the Prior's private seal, Cockersand Abbey, Lancaster Priory, Whalley Abbey, and Hornby Priory.
2. A gold figure of an animal, found in one of the graves of the early races of men at Medellin, South America.

3. By permission of Mrs. John Cooke of Claughton, a very massive gold ring, having an oval head, on which is engraved an arm holding in the hand a sunflower, between the letters T and S—found near Beeston Castle.
2. A fine water-colour drawing of the interior of Roscoe's library, by Samuel Austin. On the right hand of the picture stands on a bracket the bust of Lorenzi de Medici, given to Mr. Roscoe by the city of Florence, and in the centre of the room is the statute of Modesty, by the late John Gibson, R.A.

By Mr. Samuel Smith, Jun., in illustration of his paper.
A collection of Current German Thalers.

By Mr. F. J. Jeffery.
Two fine examples of the Prussian Thaler, one in silver and one in gold, executed for distribution among the members of the court.

By Mr. B. L. Benas.
A collection of Greek Coins, in illustration of his Paper on that subject.

The following Papers were read:—

On Current German Thalers,* *by Samuel Smith, Jun., Esq.*

On Greek Coinage,† *by B. L. Benas, Esq.*

March 10th, 1870.

Rev. Dr. Hume, President, in the Chair.

The following objects were exhibited:—

By General Bellasis.
A drawing of an ancient window in Windermere Church, described in Baines's History as consisting of seven compartments or partitions, in three of which are depicted, in full proportion, the Crucifixion, with the Virgin Mary on the right and the beloved disciple on the left of the Cross. The rest of the window is filled up with other scripture subjects, and the arms of several benefactors, amongst whom are Lancaster, Urswick, Harrington, Fleming, and others. The President stated that the window had probably been put in the building between the years 1413 and 1537.

By David Buxton, Esq.
Several copies of the *Liverpool Mercury*, of the date 1817-1818, which had been lent by Mr. Henry Cuming, of the Old Parsonage, Edge Hill, and from which Mr. Buxton read several quaint and interesting extracts, illustrative of the modes of conveyance, political animosities, and other social characteristics of the town and nation upwards of 50 years ago.

* Transactions, page 247. † *Ibid*, page 163.

By the Rev. Dr. Hume, in illustration of a recent paper by Mr. Benas. Tracings or drawings of several Beggars' Badges, which gave their bearers license to ply in a limited district. In England the Poor-Law system has existed so long that badges of this kind are extremely rare. But, in Ireland, where the Poor-Law was introduced so recently as 1839, these badges were in use till about 1820 in some localities, and to the end of last century in many more. The Rev. James O'Laverty, P.P. of Holywood, near Belfast, has been a collector of them, and has furnished several of these specimens.

1. CHAPPELL OF KILCOW 1707 [Kilcoo in the County of Down].
2. ARQ : ARCH · WITR P : B · PH · TRWS : SL · 1707 [*Ar*(d)*q*(uin),.....*Witt*(e)*r* *P*(arish), *B*(ally) *Ph*(ilip), (Bally) *Trus*(tan), *Sl*(anes).]
3. PR OF TIE : N : CE ARMAGH . with star and crescent inside. [Parish of Tynan, Countie Armagh.]
4. No. PARISH OF TIDAUNET 1742 [Parish of Tydavnet in the Diocese of Clogher, and near Monaghan.]
5. POOR HOUSE. [Badge of Pewter issued by the Belfast Charitable Society, under the powers of their act of incorporation.]
6. PARISH of HILLSBOROUGH. In the interior a Church and No. This is of Brass, slightly oval.

The following paper was read :—

THE HISTORY OF THE WARRINGTON BLUE COAT SCHOOL,* *by John Bowes, Esq.*

March 24th, 1870.

Rev. Dr. HUME, President, in the Chair.

The President exhibited a photograph and several drawings of parts of the ancient window in Windermere Church, a complete drawing of which had been exhibited at the previous meeting, by General Bellasis.

The following paper was read :—

ON PRIMARY EDUCATION, WITH A SPECIAL REFERENCE TO LIVERPOOL,† *by the Rev. Dr. Hume.*

April 7th, 1870.

Rev. Dr. HUME, President, in the Chair.

The following objects were exhibited :—

By Mr. Peter R. McQuie.
A pair of ancient Military Spurs, said to have been found during some excavations in Parliament Fields, Liverpool.

* Transactions, page 89. † *Ibid*, page 35.

By the Rev. Dr. Hume.

A very curious piece of Needlework, executed by a common sailor, representing a ship in full sail, the various details of the picture being rendered with much artistic skill.

The following papers were read :—

THE EARLY INHABITANTS OF LANCASHIRE AND THE NEIGHBOURING COUNTIES, AND REMAINS OF THEIR MYTHOLOGY AND LOCAL NOMENCLATURE,* *by Charles Hardwick, Esq.*

THE BURNLEY GRAMMAR SCHOOL,† *by T. T. Wilkinson, F.R.A.S.*

April 21st, 1870.

Rev. Dr. HUME, President, in the Chair.

Mr. Elsby presented to the Society two copper plates, illustrating objects found by the late Miss Tinne during her explorations in Central Africa.

The following objects were exhibited :—

By Mr. H. E. Smith.

A counterfeit sterling of the 13th or 14th Century, inscribed—*Obverse*, Nom. Julius Cæsar. *Reverse*, Du C'rum Cæsar. Part of a hoard found in Carnarvonshire, unique and unpublished.

By Mr. Thomas Gibson.

A brass vessel called a concha, a drinking vessel used in India.

By Mr. Moore, of the Free Public Museum.

A fine antler, and portion of the skull attached, of a fine large stag, lately found in clay and sand overlaying the upper forrest bed on the Cheshire shore.

By Mr. Blundell.

1. A book of sermons preached in 1494, by Savonarola, the great Florentine preacher and political reformer, printed on good paper, and bearing the date 1544.
2. A curious collection of poems, published in 1597, comprising "The Poor Widow's Mite," "A Handful of Honeysuckles," and "The Seven Sobs of a Sorrowful Soul for Sin."

The following papers were read :—

ARCHÆOLOGY IN THE MERSEY DISTRICT IN 1869,‡ *by Mr. H. Ecroyd Smith.*

THE PROGRESS OF SHIPPING AND NAVIGATION, *by J. M. Walthew, Esq.*

* Transactions, page 139. † *Ibid*, page 19.
‡ *Ibid*, page 267.

THE ANNUAL EXCURSION.

This took place on Saturday, June 18th; the locality chosen being Hawkstone, Shropshire, the seat of Lord Hill, who had kindly granted permission for the visit of the Society. The party, numbering about 80 members and friends, including ladies, left Lime Street Station, and proceeded to Wem Station, where open carriages were in waiting to convey them to Hawkstone Park. The company were delighted with the charming scenery of the park, and the large variety of interesting objects, including the ancient ruin of Red Castle.

Dinner was served at the Western Hotel, in the Waterloo tent, kindly lent by Lord Hill for the occasion, the tent having historic interest from the fact that it was used by an ancestor of Lord Hill's soon after the battle of Waterloo to celebrate that great victory.

After dinner a number of toasts were proposed by the Rev. Dr. Hume, who occupied the chair, and several others of the Society. The Chairman having proposed the usual loyal toasts,

Mr. Meadows Frost, of Chester, gave "Success to the Historic Society of Lancashire and Cheshire." That was the first part of his toast, and it would be received perhaps with moderate applause, but with inward satisfaction, as it was wishing success more or less to themselves. The second part, he said, would be received with loud applause, for he connected with the toast the name of Mr. Joseph Mayer, a gentleman who was known far and wide for his vast liberality. His intelligence and goodness of heart had endeared him to every one who knew him.

Mr. Mayer, in replying, said he felt very much obliged to them for the kind way in which they had received his name in connection with the toast; and as a humble worker in the Society he appreciated the first part of it very sincerely. For twenty-two years they had fought the battle against prejudice and ignorance, for none but the ignorant would speak out against them. Thoughtful men stood aside and said, "What are these men so earnest about? there must be something in what they are doing." They would listen, and did listen; and he thought that to the Historic Society of Lancashire and Cheshire the whole country was indebted for suggestions that were never made by any other Society.

Mr. Buxton proposed the health of the Chairman, and expressed his gratification, and, he was sure, that of the other members of the Society, that Dr. Hume was now able again to resume the presidential chair.

The Chairman replied, and thanked them all for their kind wishes.

The toast having been responded to with loud applause, Mr. Charles Dyall proposed the health of the ladies, which was replied to by Mr. Parratt, jun., and the proceedings terminated.

Tea was partaken of, like dinner, under the cool and refreshing shades of the tent, and shortly afterwards the whole party returned in the conveyances to Wem. The ride back was equally as pleasant as the journey in the morning. A drive through the quaint old streets of Wem was also much enjoyed, after which half an hour was agreeably spent in a visit to the old churchyard. The train for home started at half-past eight o'clock, and the party arrived in Liverpool shortly after eleven, exceedingly delighted with their visit to Hawkstone Park.

DONATIONS TO THE LIBRARY.

Ante-Nicene Christian Library—comprising the writings of Tertullian, Clement of Alexandria, Methodius, Alexander of Lycopolis, Peter of Alexandria, Cyprian, Novatian, Miuncius, Felix, &c. ; presented by R. A. Macfie, Esq., M.P.

Archæologia; or Miscellaneous Tracts relating to Antiquity. Vol. xlii, 1869.

Archæological Institute of Great Britain and Ireland. Proceedings, including the Winchester, Norwich, York, Lincoln, and Oxford volumes.

Architectural Societies of Lincoln, York, Sheffield, Northampton, Bedford, Worcester, and Leicester. Reports and papers.

Architectural and Archæological Society of Liverpool. Proceedings. Dec., 1869.

Birkenhead Free Public Library. Thirteenth Annual Report.

Birmingham Free Reference Library. Catalogue.

Boston Natural History Society. Memoirs, vol. i, part 4; Occasional Papers, vol. iv; and Proceedings, vol. xii (signatures.)

Boston Smithsonian Institute. Report for 1867.

Buckinghamshire, Records and Notes of the Antiquities of.

Bulletins de la Societè des Antiquaries de l'Ouest. 1869.

Cambridge Philosophical Society. Vol. xi, parts 2, 3, and 4.

Christiania, University of. Transactions and papers, including a republication, in the Danish language, of an Ancient History of Thomas a'Beckett, Archbishop of Canterbury.

Church Congress held at Liverpool, October, 1869. Report; from the Editor, the Rev. Dr. Hume.

Curiosities Numismatiques. Extrait de la Revue de la Numismatique Belge: from C. Roach Smith, Esq.

Cornwall Polytechnic Society. Proceedings.

Geological Society. Proceedings.

Geological Society of Ireland. Proceedings.

Geological and Polytechnic Society of the West Riding of Yorkshire. Proceedings, 1869.

Historical and Archæological Society of Genoa. Memoirs and Transactions.

Ireland, Journal of the Archæological Association of. Nos. 4, 5, and 6, vol. 1.

——— Geological Society of. Quarterly Journal and List. November, 1869.

Lady's and Gentleman's Diary, and Poetical and Mathematical Almanac; from T. T. Wilkinson, F.R.A.S.

L'Eglise de Germigny et Celle de Beaulieu, sous Loch; from C. Roach Smith, Esq.

Liverpool Institute. Forty-fifth Annual Report.

Manchester Literary and Philosophical Society. Vols. iii, iv, v, and vi.

National Association for the Promotion of Social Science (Bristol meeting.) Proceedings, 1869.

Northumberland and Durham Natural History Society. Transactions.

Records of the Priory of the Isle of May.

Roman Coins found on Salisbury Plain, an account of; from C. Roach Smith, Esq.

Royal Asiatic Society. Proceedings, vol. iv, part 2.

Royal Dublin Society. Proceedings.

Royal Institution of Cornwall. Proceedings.

Royal Kilkenny and South-east of Ireland Archæological Society. Proceedings.

Royal Society of Edinburgh. Proceedings, 1868–69.

Royal Society of Edinburgh. Transactions, vol. xxv.

Royal Society of Northern Antiquaries, Copenhagen. Proceedings and papers.

Royal Society. Proceedings, part 117, vol. xviii.

Royal Society. Proceedings, parts 111–114, 115, vol. xviii.

Royal Society. Proceedings.

Scientific Opinion. No. 64, vol. iii.

Society of Antiquaries of Scotland. Vol. vii, part 1.

Society of Arts. Journal.

Society of Arts. Journal, Nos. 891, 892, 893, 895, 896, 897, 898, 900, 903, 906, 908.

Society of Antiquaries, London. Proceedings, vol. iv.

Society of Antiquaries of Scotland. Proceedings, vol. viii, part 1.

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INDEX.

A

Acton Grange, Township of, 209.
Address to the Members of the Historic Society of Lancashire and Cheshire, by the Rev. Dr. Hume, 1
Altcar, Township of, 245
A Littoral Survey of the Port of Liverpool, 171
Anglo-Saxon and mediæval remains at West Kirby, 270
Annual excursion, 306
——— general meeting, 295
——— report, 295
Appleton, township of, 210.
Archæology in the Mersey District, 1869, 267
Archæology, definition of, 3; materials for the study of, 9
Austrian army, cost of the, in 1864, 68

B

Baldwin's Prehistoric Nations, quoted, 147
Balænoptera Sibbaldii, 299
Beggars' badges, 304
Bellasis, General, 303
Benas, B. L., author of papers, 55, 77, 163; exhibiter 298, 300, 303
Bewsey valley at Warrington, geological structure of, 269
Bidston-cum-Ford, situation of, 187
Birkenhead, situation of, 187
Biographical Sketch of William Everard, Architect and Surveyor, of Liverpool, 1723–1792, 127
Blundell, W. J., 305
Bootle-cum-Linacre, township of, 238
Boult, Joseph, author of paper, 171
Bowes, John, author of paper, 89
British Association, objects and operations of, 10
Bromborough, township of, 194
Budgets of Europe for armies and navies, 73
Burnley Grammar School, history of, 19; masters of, 26, 32
Buxton, David, F.R.S.L., 298, 303

C

Charles II, extravagance of, 62
Cheshire shore, archæological produce of, 276
Childwall, parish of, 221
Clifton, township of, 201
Coin trouvailles in Wales, and the treasury claims, 292
Coinage of Greece, 164
Coined Money, origin of, 164
Coins, advice as to collecting, 169
College, want of in Liverpool, 14
Compulsory education, how to promote, 50
Conscience clause in scheme of education, 41
Congregational system, 44
Cuerdley, township of, 216
Customs, amount yielded by before the Civil Wars, 61
Cuttle fishes, 299

D

Dawson, Henry, 302
Debt of Great Britain, 56; of United States of America, 57
Diocesan inspection of Schools, 52
Ditton, township of, 220
Dyall, C., 301, 302

E

Early delft cup, 282
Eastham, township of, 195
Education in Liverpool, 34; demand and supply in Liverpool, 37; effects of apathy concerning, in Liverpool, 40
——— denominational system of, 43
——— in rich and poor districts, 45
——— rate for the support of, 46
Educational grants in England, Prussia, and Russia, 70
Elsby, Miles Pilling, 305
Enamelled patch box,
Etymology, wild and extravagant systems of, 140
European States, finances of, 74
Everard, William, founder of the Liverpool Library, 130
Expenditure, sample of that of Great Britain for one year, 68

F

Facts and Suggestions connected with Primary Education, with illustrations from the Borough of Liverpool, 35
Farrar's Essay on the Origin of Language, quoted, 162
Fashions in Dress, similarity of, in 1790 and 1869, 134
Feudalism, decline of in England, 59
Formby, township of, 245
France, cost of the army of, in 1865
French Republic, cost of the war against, 66
Frodsham, township of, 198

G

Garston, township of, 224
George II, cost of the wars of, 64
George III, events in the reign of,
German Thalers, description of, 255
Gibson, Thomas, 305

Grammar School at Burnley, 19
Great Britain, state of education in, 71; government vote for, 72
Great Crosby, township of, 242
Great Meols, situation of, 177
Great Stanney, township of, 196

H

Hale, township of, 221
Halewood, township of, 290
Hardwick, Charles, author of paper, 139
Heffer, E. A., 297
Higgins's Celtic Druids, quoted, 150
Higher Bebington, shore of, 193
Hilbre Island, situation of, 174
Historic Society of Lancashire and Cheshire, objects and operations of, 2
Hoose township, situation of, 176
Hooton, township of, 195
Hume, Rev. A., author of paper, 1, 35; exhibiter, 297, 299, 300, 301, 302, 304

I

Ignorance and crime in Liverpool, 37
Ince, township of, 197
Insane paupers in England in 1869, 83
Inscriptions in foreign languages on public buildings undesirable, 132
Instructed children in different countries in 1850, 72; in 1860, 73

J

Jacob, John G., 299
Jeffery, F. J., 303
Jones, Rev. C., 298

K

Kelly's Curiosities of Indo-European tradition, quoted, 152
Kilpin, T. J., author of paper, 127
Kirkdale, township of, 236

L

Lancashire, population of in 1861, 83; emigration of paupers from in 1868, 84
Latchford, township of, 211
Leasowe Lighthouse, 177
Library, donations to the, 307
Liscard, situation of, 179
Literature, character and tendency of, 6; study of, 9
Litherland, township of, 241
Little Crosby, township of, 244
Little Meols, situation of, 175
Liverpool, visit of the British Association to, and its lessons, 11
——— public institutions of, 11; learned societies of, 12; intellectual progress of, 13; state of education in, 35; number of uneducated persons in, 38; corporation schools of, 49
——— Library, origin of the, 130
——— Observatory, erection of, 136
——— survey of the port of, 171
——— parish and township of, 235
——— history, 280
Lord Brougham, opinion of respecting national indebtedness, 66
Lower Bebington, 193
Lower Walton, township of, 209

M

McQuie Peter R., 304
Manchester, suggestion from respecting religious education, 52
Martin Mere, description of, 273; primitive canoe found at, 272
Mayer Joseph, F.S.A., 297, 302
Milton shield, 302
Moore T. J., 297, 299

N

National Debt in the time of George I, 64
Natural science, tendency of, 3
Netherpool, township of, 195
Norton, township of, 208

O

On Current German Thalers, 247
Old English shillings found at Formby, 275
On Greek Coinage, 163
On the Political Economy of Great Britain. Part I. Public Indebtedness, 55. Part II. The Poor Laws, 77
Origin and History of the Warrington Blue-Coat School, 89

P

Pauperism in Liverpool, 37
Paupers receiving relief in England in 1869, number of, 82
Penketh, township of, 215
Perthes, M. de, researches of, 4
Peruvian mummies 299
Poor, mode of providing for the relief of, 80
Poor-rate, amount of in the time of George I, 81; mode of levying, 87
Printed enamelling, 284
Proceedings of the Historic Society of Lancashire and Cheshire, 295
Public revenue in the time of Cromwell, 62

R

Rate for education, 46
Rathbone family, particulars of the, 287
Raws, Rev. John, 26
Religious education, importance of, 42; compatible with local rates, 48; what it is, 51
Richard, Henry, paper quoted respecting the finances of European states, 74
Roberts, Isaac, 296
Runcorn, township of, 204
Russia, cost of the army and navy of in 1869, 69; deficiency in the revenue of, 74

S

Schools amongst the Greeks, 89; origin of amongst the poor, 90
Science, departments of, 8; terms in, 15
Sestercius, 298
Smith, H. Ecroyd, author of paper, 267; exhibiter, 297, 298, 305
Smith, Samuel, Jun., author of paper, 247; exhibiter, 298, 303
Speke's Journal of the discovery of the source of the Nile, quoted, 158

Speke, township of, 223
Spezzia, congress of prehistoric archæology of, 5
Stanlaw, Parish of, 197
State and prospects of the Church in Liverpool, by Dr. Hume, quoted, 37
Steyperydr, 299
Sutton, township of, 200

T

THE EARLY INHABITANTS OF LANCASHIRE AND THE NEIGHBOURING COUNTIES, AND REMAINS OF THEIR MYTHOLOGY AND LOCAL NOMENCLATURE, 139.
Thomas George, elected a member, 297
Token of Peter Atherton, 17th century, 286
——— (17th century) Rathbone family, 287
Toxteth, township of, 228
Tranmere, description of the shore of, 190
Treasure trove, laws concerning, 293
Tumuli at Rudstone near Bridlington, 299

U

United States of America, population of in 1860, 70; newspapers of in 1775, 70; number of schools in in 1860, 70, 71

V

Vaudrey, B. Llewellyn, elected a member, 300
Veda, derivation of the term, 142

W

Walcott, Rev. Mackenzie E. C., B.D., F.S.A., 301
Wallasey, situation of, 178
Walthew, J. M., 300
War, disastrous consequences of, 75.
Warrington Blue-Coat School, origin and history of, 89, 91; trustees of, in 1738, 99; in 1764, 100; in 1801, 106
———— Blue Coat Brotherly Society, 115
———— township of, 212
———— prices of labour in in 1711, 97
Weston, township of, 202
Whitby, township of, 196
Widnes, township of, 217
Wilderspool, archæological operations at, 268
Wilkinson, T. T., author of paper, 19
Windermere church window, 303

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